# Fintech: another broken promise to the global poor?

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Abstract

Fintech is widely promoted as a transformative tool for financial inclusion and poverty reduction across the Global South. This chapter critically examines that claim, situating fintech within the longer history of microcredit, microfinance, and the broader project of market-based inclusion. It synthesises evidence on the impacts of poverty finance and analyses the political-economic transformations associated with fintech, particularly mobile money and digital credit, in lower-income countries. The chapter argues that fintech has largely extended, rather than overcome, the contradictions of earlier waves of financial inclusion. While expanding access to payments, credit, and other financial services, fintech deepens the incorporation of low-income populations into financial markets through new forms of indebtedness, data extraction, and behavioural surveillance. Rather than addressing structural drivers of poverty and inequality, digital finance frequently shifts risks and responsibilities onto marginalised households while creating new opportunities for accumulation by financial and technology firms. The chapter concludes that fintech should be understood not as a developmental breakthrough but rather as a new phase in the financialisation of poverty.

## 1. Introduction

The growth of fintech in lower-income regions of the world is often justified with large numbers of people lacking access to financial services: 1.4 billion people globally do not have any kind of financial account (Klapper et al. 2025: 1), and bank account ownership is lowest in Sub-Saharan Africa (below 40 percent), compared with over 70 percent in South Asia, Europe and Central Asia, and East Asia (*ibid.:* 93). In Sub-Saharan Africa – where over 80 percent of working people are in informal employment, and most have irregular incomes and limited savings capacity – many people would, no doubt, like to have access to more and better

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financial services, and for some, at least, access to responsibly delivered financial services could potentially make a significant positive difference in their lives. However, what if the problem with (profit-driven) financial inclusion is not only exclusion of some people, but also the *adverse* incorporation[3] of many others? When it comes to fintech and the wider promise of financial inclusion in the Global South, the reality of this 'inclusion' is that it often imposes exploitative and disempowering conditions upon impoverished people[4], including through high fees, steep interest rates and subjection to intensely data-extractive business models.

Increasingly, "everyday indebtedness is not a marginal or exceptional phenomenon, but a structural feature of contemporary economic and social systems" (Natal and Guérin 2026: 3), such that at least one third of the world's population, over 2.59 billion people – the vast majority of whom are in the Global South – are estimated to routinely use debt to make ends meet (*ibid.*). In this context, impoverishment is as much, if not more, a function of how people are *included* in the financial system as much as how they are excluded from it.

As this chapter discusses, there are deep structural reasons why the now more than 40-years-old global financial inclusion agenda – spanning from microcredit to microfinance to digital financial inclusion and inclusive fintech – has failed time and again to deliver inclusion on terms that actually benefit the majority, as opposed to a narrow elite. Women and men who become 'included' in "poverty finance" (Rankin 2013; Bernards 2022) face conditions which are neither of their own choosing nor innately designed to be for their benefit. Rather, the conditions – including interest rates routinely over 50 percent per annum, and often far higher – are, in the first instance, designed to make financial inclusion 'work' for the providers. Fintech-enabled inclusion thus needs to be understood less as an extension of welfare-enhancing services and more as the incorporation of new populations into a broader "finance web" (De Masi 2023b: 4) woven by financial and technological actors and, more and more, also states. The resulting system is fundamentally an expression of the extreme structural power imbalance between capital-poor clients and capital-rich financial service providers: a 21st-

[3] Hickey and Du Toit (2013) coined the term "adverse incorporation", which has come to serve as a critical counterpoint for the analysis of inclusion agendas, focusing attention on the harms and risks which low-income people must often bear as the 'price' for inclusion. Applied to digital development agendas, Heeks (2012) has proposed "adverse digital incorporation" as "inclusion in a digital system that enables a more-advantaged group to extract disproportionate value from the work or resources of another, less-advantaged group" (p. 689).

[4] Terminological note: in this chapter, we generally use the term "impoverished people" to draw attention to the fact that poverty is not an innate quality or status but a condition imposed through socio-economic relationships, or "lower-income people" as a term of convenience. In using the terms "Global South" and "lower-income countries", we avoid the often-misleading term "developing countries" to collectively refer to countries in the global economic periphery, mainly in Africa, Asia and Latin America.

century digital colonialism that resembles erstwhile colonial structures of unequal participation and South-to-North economic extraction (Bernards 2022; Langley & Leyshon 2022).

This chapter has a focus on Sub-Saharan Africa – the region of the world where mobile-based financial services have been most strongly ascendant – but explicitly locates that region's experience in the wider global context. It traces the ascendancy of digital financial inclusion and fintech within the broader rise of the poverty finance industry (Rankin 2013; Bernards 2022) and the still-ongoing financialisation of development (Mader 2015; Chiapello et al. 2023). Section 2 will present a multidimensional review of the evidence on how financial inclusion activities interact with impoverishment. Section 3 will trace the turn from earlier financial inclusion activities to fintech in the Global South, looking beyond (more widely-discussed) payments systems to reveal the hidden layer of debts that buttress the fintech industry's growth. Lastly, section 4 will examine the shifting roles of the state in the fintech industry, before we conclude with notes on how fintech could be reimagined.

## 2. Poverty finance and its impacts

Hundreds of millions of women and men have, in the era of global financial inclusion efforts, entered as clients into what Rankin (2013) and Bernards (2022) call the "poverty finance" industry. Poverty finance, as we use the term here, comprises the broad gamut of formal financial service providers who focus part or all of their business on lower-income population segments in the Global South and whose formal or *de facto* goal is to earn a profit and/or fund their business in this way. This comprises both brick-and-mortar microfinance institutions (MFIs) – both the commercially-oriented and the increasingly more marginalised non-commercial variety – and fintech players whose mass-market orientation entails, in low-income settings, by default a focus on impoverished population segments.

The poverty focus is often publicly justified by institutions and their promoters with claims about the advantages of financial inclusion for low-income people, rather than the extraordinary profit potential. Therefore, the evidence regarding the impacts of financial inclusion writ-large needs to be examined before we turn to discussing the processes of extraction facilitated by the industry's increasingly digitalised activities. This is particularly important because the wide-ranging social-scientific evidence regarding the impacts paints a mixed and inconclusive picture, contrasting with the widespread portrayal of financial inclusion as an effective anti-poverty agenda by major development actors.

### *a. Extreme cases*

As an entry-point into the impact question, a brief discussion of some of the more extremely negative impacts which financial inclusion has produced will help to correct the *a priori* presumption of generally positive impacts stemming from several decades of "impact washing"[5] of the small loans business by the microfinance industry and its promoters. Some of the documented harms of microfinance – including organ sales (Moniruzzaman 2025), family breakdowns, suicides (Mader 2019), collateral loss, and the microfinance experience of the entire country of Cambodia – are extreme in every sense. Together with deeply researched journalistic reporting (see, for instance, Kardas-Nelson 2024; Finch *et al.* 2022) that has documented how becoming 'financially included' led many impoverished people onto long-term treadmills of debt that sustain payments to the poverty finance industry whilst also sustaining impoverishment, they form part of the heterogenous global picture of the impacts of financial inclusion.

At the level of a whole country, an extreme case is Cambodia, a nation of 3.6 million households where the microlending industry has issued loans to more than 3.2 million borrowers. After years of global development funders pouring in public money alongside a flood of private investment whilst ignoring rising reports of over-indebtedness, Cambodia's microcredit loan portfolio stood at $18 billion in 2022, equivalent to 61 percent of GDP (Green 2025). Peasant farmers in Cambodia now routinely owe tens of thousands of dollars, which nobody could realistically expect them to ever repay. Almost all loans are secured by land titles, and careful research has documented widespread patterns of land loss due to financial distress. One survey of Cambodian microfinance borrowers in 2022 found 6.3 percent of households had been forced to sell land due to microfinance debts, suggesting around 167,400 individuals or households across Cambodia may have already lost land in this way (Bliss 2022). The consequences include a descent into deeper poverty, involuntary migration, and environmental degradation (Green & Vouch 2026).

### *b. Averages and beyond: quantitative and qualitative impact findings*

The global academic evidence base defies an easy summary, considering that social-scientific researchers from disciplines including economics, anthropology, geography, and sociology, as

[5] "Impact washing" or "purpose washing" are terms which have found increasing traction in literature on impact investing. They describe the dressing up of regular business activities and investment opportunities in claims of impact for marketing or reputational purposes (see Findlay and Moran 2019).

well as research fields such as gender studies and development studies, have for more than thirty years studied the impacts of microfinance and other financial services aimed at low-income people.[6] To synthesise the evidence – with all its trends and cross-currents – as, in summary, 'mixed and inconclusive', as we do here, subsumes a wide range of insights from quantitative and qualitative sources regarding the economic, social and gender impacts, without aiming to falsely reduce these to claims about a positive, negative or zero average effect.

The overall 'mixed and inconclusive' evidence on financial inclusion suggests that some people benefit while others lose, because while some studies find positive impacts others find no impacts or negative impacts. That is: there is significant heterogeneity across contexts and interventions. 'Mixed and inconclusive' also highlights how, very often, within the same study different indicators show positive or negative effects, and these in turn accrue to different sub-populations – that is: there is huge within-population heterogeneity of the effects of using financial services. Some people benefit and others are harmed, and in different ways. Finally, given the difficulty of separating unbiased evidence from problematically designed or poorly implemented studies (cf. Bédécarrats *et al.* 2019) – let alone the sheer volume of mis- and disinformation about impacts disseminated by the financial inclusion community itself (see Bateman 2026) – the 'mixed and inconclusive' label highlights that it is not possible to say that financial inclusion has, for the majority of people, so far had a provable positive effect.

On the *quantitative* side of this picture, researchers in economics have, in the majority, been upbeat and positive about the potentials of financial inclusion, launching thousands of studies aimed at proving positive impacts. This research community's methodological aspirations culminated in the mid-2000s in a stream of randomised controlled trial (RCT) studies whose findings, however, have been largely disappointing in terms of an absence of demonstrable effects on key poverty indicators such as household earnings or assets. Many RCT authors hence have subsequently pivoted towards emphasising – or, arguably, exaggerating – the importance of relatively minor behavioural changes such as enhanced money management capabilities (especially the ability to meet unanticipated or anticipated expenses) and changes in the composition of household expenditures, such as reduced spending on discretionary consumption and increased investing in microbusiness activities. Yet even long-standing academic proponents of microfinance and financial inclusion, such as Abhijit Banerjee, Dean

[6] At the time of Maren Duvendack *et al.'s* (2011) pioneering systematic review, there were already 2,643 research studies on microfinance. Our brief summary can only provide a snapshot based on a small selection of references.

Karlan and Jonathan Zinman (2015) have had to acknowledge the "lack of evidence of transformative effects on the average borrower" and note that the evidently heterogeneous effects of microcredit suggest it is "good for some, bad for others" (p. 3). Nonetheless, independent analyses suggest that even these interpretations of RCTs' findings may still be excessively positive because RCTs have generally shied away from evaluating the downside risks, such as overindebtedness, and often suffer from deep methodological flaws that draw into question their results (Bédécarrats *et al.* 2020).

These studies sit alongside a wealth of *qualitative* evidence that offers intricate insights into how people experience and navigate the poverty finance industry and how engaging with it affects individuals, families, and communities (in both positive and negative ways). Peters *et al.* (2016), for instance, in a systematic review of qualitative evidence from South Asia, point to a mix of gains and losses for women participating in microfinance programmes. They emphasise the importance of necessary supportive conditions for positive effects to occur and highlight how stand-alone financial services provision helps less and is more likely to lead to harms than programmes which deliver financial services as part of a broader package. Gender-focused qualitative studies from around the world emphasise that women often primarily use financial services to support their households and to make ends meet. To the extent that women pursue personal ambitions for empowerment and entrepreneurial success through small loans, they routinely face greater risks than men, are more constrained by structural economic barriers, bear double workloads, and run into a 'glass ceiling' of gendered norms and expectations about what is appropriate 'women's work' (Maclean 2013; Sarr and Fall 2021; Guérin, 2023). Women already more heavily carry the financial, social and physical burdens of debt, yet poverty finance providers often prefer lending to women because of their perception as more obedient and controllable borrowers (Karim 2011; Radhakrishnan 2021).

### *c. A bird's-eye overview*

This mixed and inconclusive picture has been confirmed by two relatively recent comprehensive high-level review studies (one was co-led by one of this chapter's authors). Drawing on the fact that, as of 2019, already 32 Systematic Review[7] (SR) studies had been

[7] A Systematic Review (SR) is a study that uses structured and transparent methods to provide a comprehensive picture of the evidence regarding a particular question, a very important element of which is to grade the reliability of the underlying evidence base so as to only draw conclusions from robust studies. Unfortunately, an increasing number of studies claim to be SRs without having used rigorous methods.

published on financial inclusion, Duvendack and Mader (2019) reviewed these studies systematically and thereby synthesised the findings of hundreds of underlying studies.[8] This Review of Reviews (RoR) found that the impacts vary, are often mixed, and not transformative in scope or scale and, crucially, that effects on core poverty indicators such as incomes, assets or spending are small and inconsistent. While women's empowerment impacts generally are positive, these are usually attributable to *non*-financial forms of support attached to financial inclusion programmes, such as women's rights education and social networking, not the financial services themselves.[9] Overall, as the RoR found, the problem with the evidence base is that the effects of financial inclusion are

> strongly heterogeneous, both across studies and over time, places, populations, gender and ethnicity as well as between interventions; this suggests them to be unreliable and/or context-dependent. Positive findings tend not to repeat from one context, intervention-type or study to another, and at least as many findings are mixed or inconclusive as are positive. (Duvendack and Mader 2019: 4)

In sum, despite the wealth of studies and boosterish claims made by the poverty finance industry's advocates, one cannot generalise that financial inclusion, especially in the form of credit, helps impoverished people. One silver lining, at least, from the review of reviews is that having access to *savings* services has consistently positive, if small, effects and (as one would expect) few downside risks.

A similar picture emerged from a 2023 review by the World Bank's Internal Evaluation Group (IEG), which came to a shockingly (for the Bank) critical conclusion about the Bank's level of support for financial inclusion, urging it to reassess its work in this space and improve its impact evaluation practices. The IEG's review of the most recent publications not only "confirmed a mixed picture of the evidence for the benefits of financial inclusion to the MPWEG[10] and other financially excluded and underserved groups" (World Bank 2023: x) but, even more critically, also explicitly highlighted the importance of findings from "a growing literature on the potential negative impacts of some financial inclusion efforts on the lives of the poorest people" (*ibid.*: 158), such as debt distress and disempowerment of women. The review concluded:

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[8] The 32 SRs were narrowed down to 11 studies deemed methodologically 'good enough' to be reliable and thus worth reviewing. Each of these studies, in turn, had reviewed between 12 and 90 underlying studies (mean=36).
[9] The women's empowerment effect was also found to be highly sensitive to how authors chose to define and measure 'empowerment'.
[10] "MPWEG" refers to "microenterprises, poor households, women, and other excluded groups", the World Bank's self-defined target group for financial inclusion.

> By design, financial inclusion efforts target the symptoms of poverty rather than the cause. Therefore, what is clear from the literature is that financial inclusion is not a solution to poverty; it just provides poor people with tools to navigate it. (*ibid.:* 161)

### *d. Resistance as borrowers' own evidence*

Finally, a very different type of evidence on financial inclusion's impacts, albeit one rarely considered by academic research and evidence reviews, also comes directly from clients in the form of the many mass non-repayment events, protests and resistance movements related to financial inclusion. As documented among others by Guérin *et al.* (2015) and Mader (2015, p. 68-75), a proliferation of repayment crises has seen the poverty finance industry partially or wholly collapse in a number of countries. Well-documented crises occurred in Bolivia (2000-1), Nicaragua (2008), Pakistan (2008), Bosnia-Herzegovina (2009-10), Morocco (2009-13), Sri Lanka (2021-23), and various parts of India (on several occasions between 2006 and 2025). The collapse of microfinance in the Indian state of Andhra Pradesh in 2010 made global headlines after a wave of suicides – some directly induced by lenders seeking to recoup unrepayable loans via borrowers' life insurances – led to mass protests that forced the state government to temporarily interdict all microfinance activities (Mader 2019).

Reckless lending which created unsustainable debt burdens was a key factor in these collapses. But at least equally important were, in many cases, social movements organised by clients to stop repaying loans, demand concessions from lenders, and appeal to political authorities for debt relief and protection from harms (Guérin *et al.* 2015; Mader 2015). These actions speak louder than words. When borrowers become unruly, collectively organise, and refuse to repay loans, they take major personal risks, including being harmed bodily, dispossessed of assets, prosecuted, imprisoned, and financially blacklisted. Therefore, such activities represent a last resort. They starkly indicate how mismatched the terms and conditions of financial inclusion are with the actual needs of clients (Mader 2017). Borrowers' words and actions suggest that (at least under particular circumstances) to disengage, i.e. re-exclude oneself from inclusive finance, can be more empowering and positively impactful than to further engage with it (Mader 2024: 6).

## 3. The turn to fintech

### *a. From the financialisation of poverty to its digitalisation*

Far from being discouraged by the 'mixed and inconclusive' evidence regarding the impacts of financial inclusion on impoverished people, huge amounts of private and public investment have continued to flow into the poverty finance industry. Since the late 2010s in particular, these have been geared toward fuelling the industry's digitalisation and its coalescence with fintech. Fintech in the Global South, as an extension and rearticulation of the financial inclusion agenda, has built on the practical learnings from the earlier non-digital microfinance services era about how to construct financial relationships with impoverished people. These efforts to respond to the failures of earlier iterations of poverty finance, especially microfinance, "by doubling down on the neoliberal politics implicit in financial inclusion" (Bernards 2022: 113) bring into focus more clearly the question of what the economic and political growth drivers behind the poverty finance industry are.

Although financial inclusion activities are not reducing poverty, they have been successfully "financialising poverty" (Mader 2015; Duvendack and Mader 2017). The "transformation of financial circuits both locally and globally" has ensured that ever more populations and local economic circuits are connected to global finance via the activities of "private financial actors who offer them various financial products" (Chiapello et al. 2023, p. 1ff). Concretely, this means that impoverished people, who enter into formal financial relationships as self-employed workers and consumers, now generate revenues for financial service providers who can channel profits to investors. Where, previously, long-term physical investments in industrial facilities (such as garment factories) and the establishment of elaborate global value chains for physical goods were needed to make impoverished people (in countries such as Bangladesh) 'productive' for investors in the Global North, poverty finance brings more people, including people in far more remote places, into contact with agglomerations of profit-seeking pools of capital, such as microfinance investment funds or fintech venture capital. Corresponding to the wider global reconfiguration of capital accumulation toward more flexible forms (Benquet and Bourgeron 2021), spaces and populations with deep impoverishment in the majority world, who were once firmly outside global capital accumulation processes, now represent an open frontier for investment (Mader 2015; Chiapello et al. 2023).

Thanks in no small part to the "fintech-philanthropy-development complex" (Gabor and Brooks 2017) – an amalgam of international development actors and interest groups devoted

to promoting digital financial inclusion by accelerating the comprehensive digitalisation of payments in Africa's economy –, financial and technology firms have successfully inserted themselves into Africa's domestic and international economic linkages. For example, drivers working for ride-hailing platforms across the Global South now enter into financial relationships with companies (such as Uber) from whom they take out loans to pay for the car or two-wheeler that serves as the means of production to generate profits for the platform. With funding from a microloan or digital nanoloan, any small microenterprise – such as a market stall or a workshop – or pseudo-independent app-based worker can now generate financial flows that feed directly into global capital circuits. Meanwhile, payments providers can capitalise on the growth in (domestic and international) remittances, making them "count" for global financial circuits (Guermond 2024) in ways that channel the local purchasing power of economically marginalised people to the international shareholders behind the corporate-owned payment technologies and infrastructures.

### *b. Enter mobile money – extractive payments and algorithms*

Fintech presents itself as a disruptive force that cuts out 'brick and mortar' financial services as inefficient middlemen between global capital and low-income borrowers. However, many fintech firms in fact do not replace the banking system so much as add themselves on as a "veil", or additional layer, to existing banking infrastructures, often without holding banking licences themselves (De Masi 2023b: 13ff; Scott 2022). Recent increases in financial institution account ownership have been substantial – for example, rising by more than 25 percentage points since 2011 in countries such as Uganda and South Africa –, but are disproportionately driven by mobile money accounts rather than full participation in formal banking systems (De Masi 2023a). While access indicators have thereby improved, usage patterns remain uneven: in South Africa, for instance, many formally opened bank accounts are used only infrequently due to the high transaction fees and limited disposable incomes of account holders (*ibid.*).

As Internet access and mobile phone infrastructure have expanded across the continent, so has fintech usage, and nowhere in the world is the proportion of the adult population with mobile money wallets now higher than in Africa (Klapper et al. 2025: 91ff). The mobile money industry has become a massive commercial success. Safaricom, for instance, which enjoys a quasi-monopoly in Kenya's mobile money landscape, became East Africa's most valuable

company by market capitalisation in 2021.[11] Safaricom's M-Pesa money transfer service is used by over 50 million customers and has become Africa's largest FinTech platform, with other large mobile money services owned by mobile network operators such as Airtel Money, MTN Mobile Money, and Orange Money (in other countries) growing in its wake.

Mobile money is increasingly a captive market. Low-income people can now hardly avoid participating, because in many places it is increasingly difficult to seize economic opportunities without a mobile phone and mobile payments. Cashless transactions are a spectacularly remunerative business, with payment fees estimated at around $2 trillion annually (Akgiray et al. 2024). Payment processing margins in African markets are among the highest globally, typically above two percent of the transaction value, but rising as high as 8 percent or more on the smaller transactions which lower-income users are more likely to make (De Masi 2023b: 4; Mader et al. 2022: 499, 507).

The financial inclusion delivered by fintech actors thus has a high price, and not only in terms of the fees. The interest rates charged by digital lending bolted onto mobile money are also eye-wateringly high (discussed more below). Moreover, digital borrowers are subjected to sometimes extreme forms of corporate social control, including practices such as targeting borrowers' personal networks and applying pressure through various digital communication channels in cases of default. Data technology allows fintechs not only to facilitate speedy electronic payments and disburse and collect loans digitally, but also to extract phone users' personal data to build vast behavioural datasets and assess credit default risk via algorithms without the costly branch infrastructure of traditional banks. Phone users' frequency and volumes of airtime purchases are used to calculate proxies for income, and unconventional indicators such as mobile phone usage patterns, geolocation data, and even device characteristics are used to infer creditworthiness, illustrating the depth of the surveillance practised by these systems (De Masi 2023a & 2023b).

These unprecedented forms of financial intelligence and digital surveillance have been central to the neo-colonial repositioning of Africa and its 'underbanked' population as a frontier of financial opportunity (Langley and Rodima-Taylor 2022). Africa's foreign investment-, aid-, and remittance-dependent economies effectively serve as "laboratories for fintech innovation" (De Masi 2023b: 4) built on the rapid diffusion of imported mobile phones and Internet access

[11] See Business Insider Africa (2021).

provided by foreign-owned companies. This has mobilised significant investment: African fintech startups raised over USD 2 billion in 2021 alone, with four countries – Kenya, Nigeria, Egypt, and South Africa – accounting for approximately 92 percent of total investment flows (De Masi 2023a, p. 5). South Africa has emerged as a key regional hub, hosting an estimated 200 fintech firms within a broader ecosystem of over 600 technology startups, in a highly financialised economy where domestic credit exceeds 100 percent of GDP. Digital banks such as TymeBank have rapidly expanded, reaching around 3 million customers by early 2021 and adding approximately 120,000 new users per month, largely among low-income populations (*ibid.*, p. 6).

As with other aspects of poverty finance, the rise of mobile money was accompanied by research that claims positive impacts for impoverished people. But, despite the rapid proliferation of studies seeking to demonstrate the poverty-alleviating impacts of digital financial services, the vast majority of studies remains low-quality (Mader et al. 2024). The touchstone for the claims made about mobile money's impacts is a short academic paper prominently published in the journal *Science* (Suri and Jack 2016), which purports to show that M-Pesa (on its own) lifted 194,000 households (2% of Kenyan households) out of poverty between 2009 and 2014. In fact, the study suffers from such a broad range of methodological flaws and omissions that its claims of impacts are untenable (Bateman *et al.* 2019). Not only did the study lack a control group through which the researchers could compare what happened to people who were not using M-Pesa; it did not even actually measure households' mobile money usage, but instead took their proximity to recently-opened M-Pesa kiosks as a proxy, thus conflating geographic location with uptake and usage of the service. This makes it most likely that the causation was, in fact, the reverse of what Suri and Jack (2016) claimed, namely that, instead of mobile money causing rising household incomes, it was rising household incomes and economic opportunities in certain areas that caused mobile money service points to open in these locations (*ibid.*).

### *c. The hidden layer of debt*

While payments are unquestionably important to the story of Africa's fintech boom, debt nonetheless has an absolutely central function for the industry and remains the most sharply felt feature of fintech for impoverished people, even though debt's role is carefully hidden in how promoters narrate the sector's activities. For example, in the GSMA's *State of the Industry Report on Mobile Money 2025*, digital credit delivered through mobile phones was categorised

as merely one among a variety of "adjacent financial services", albeit the one "most likely to be offered" by mobile money providers (GSMA 2025: 44). The report mentions 'money' 806 times, 'payment/s' or 'transfer/s' 246 times, but 'credit' or 'loan/s' only 82 times ('indebtedness' is mentioned only 7 times).

Even the origins of the trailblazing mobile money system M-Pesa in Kenya lie in an aid-funded project launched in 2005 to improve microcredit collections through an experimental digital loan disbursal and recovery system. In the course of this experiment, it was borrowers' unexpected and creative usage of their SIM cards – many users were found, for instance, to be using SIMs to store and move money around in digital form – that led to the project's backers to eventually recognise the mobile phones' potential to serve as payments devices. The backers then shifted the focus onto building up a mobile money system (Mader 2016: 69). These true origins of Africa's mobile money boom in Kenyan users' own ingenuity – how they creatively repurposed an externally-imposed technological 'fix' for credit – have entirely been blotted out in donor- and fintech-serving narratives, where Safaricom/Vodafone and the UK aid establishment deserve all the 'credit' for this innovation (see, for instance, Mas and Radcliffe 2011). Notably, Vodafone UK ended up owning the intellectual property associated with M-Pesa (Foster 2023).

With mobile phone penetration continually deepening across Africa, digital micro- and nano-loan models have grown rapidly, leading to patterns of household dependency and long-term indebtedness. In some of the most highly developed digital debt markets, Kenya, Tanzania, and Uganda, 46%, 34% and 29% of mobile money users respectively took out "mobile money-enabled loans" in 2024 (GSMA 2025: 44). The expansion of digital credit is promoted with the claim that fintech reduces the cost of risk assessment relative to traditional banks. However, those lower costs for firms do not necessarily translate into cheaper services for borrowers, and instead often simply increase profit margins under conditions of market concentration (De Masi 2023b).

The importance of debt for the fintech industry, obscured beneath the more visible layer of mobile payments, owes to the simple fact that loans, by virtue of generating interest, have an inbuilt source of profit, unlike current account or savings services, which do not. Digital payments providers have indeed managed to develop pricing models that generate profitable fees from money transfers, but this has not led them to eschew the potentially even greater profits to be earned from digital lending, especially given their monopolised ownership of

customers' payments data. By leveraging the payments infrastructures as generators of 'big data', they sell credit to lower-income populations in Africa that otherwise reside on (or beyond) the fringes of formal finance (Langevin 2019), some of whom even microcredit providers did not touch during the microfinance industry's 20-or-so-year period of spectacular growth.

Mobile payments companies as data-driven fintech actors connect, collate and analyse disparate data points, including battery behaviour, call patterns, location, and internet scrolling and clicking behaviours (in the case of smartphone users) to calculate customers' creditworthiness (De Masi 2023a). Other approaches include "psychometric" testing to measure personality traits. Such alternative credit scores, often generated in cooperation or competition with specialised fintech firms, aim to push the limits of financial prediction by threading together "various forms of information to produce standardized, quantified, and *abstract* evaluations of credit risk" (Bernards 2019: 816). These can be produced at far lower cost than the manual creditworthiness assessments undertaken by traditional banks and even MFIs. But they also incorporate algorithmic biases and can be even further disconnected from the financial realities of borrowers' lives.

Algorithmic scoring processes, based on statistical correlations rather than causal understanding, have been shown to penalise individuals based on proxy variables such as location or behavioural patterns, and thereby reinforce existing inequalities (De Masi 2023b). Low-income users, when seeking to understand the algorithms and obtain higher credit limits as a reward for good financial behaviour, are often confronted with sudden and unexplained reductions in their credit access, which they experience as "punishment" and "algorithmic betrayal" (Wamalwa 2026). Beyond such mismatches between borrowers' moral values and expectations, algorithmic financial governance also shifts the lending decisions even further away from substantive questions about what the loan will be used for – such as supporting a potentially viable enterprise activity – toward purely behavioural metrics. This contrasts with how locally-embedded financial institutions, such as SACCOs, can (when properly governed) use their deep knowledge of members' lives, business plans, and the local economy to make decisions about what types of undertakings to finance with a loan (Magale 2026).

### *d. Structures and cycles of digital indebtedness*

Digital loans are increasingly embedded in low-income households' economic daily lives to fund family consumption and basic expenditures – food, schoolbooks, emergency expenses,

etc. – through successive, intertwined cycles of debt obtained from different platforms (Donovan and Park 2022; Wamalwa 2026). Compared to earlier microlending, the orientation of these fintech loans towards everyday consumption rather than productive investment is quite explicit. They have very short repayment periods, such as one month (an example of this being unsecured credit by QwikLoan in Ghana, up to USD 250, incurring an annualised percentage rate over 83 percent plus late fees of more than 12 percent after the month ends), and they are frequently rolled over, contributing to cycles of perpetual indebtedness (Langley & Leyshon 2022). Families already surviving on low incomes thus suffer continual outflows of interest and fee payments, contributing to their further impoverishment. Moreover, the physical labour and emotional burden of the required debt management and repayment associated with this form of securing daily provision and care for families *through debts* usually falls squarely on women's shoulders (Radhakrishnan 2021; Kaushal 2025; Reboul et al. 2026; Wamalwa 2026). Repayment discipline is reinforced through punitive measures such as the 'smartphone locking' undertaken by digital lenders in India, which can deprive borrowers of their livelihood.[12]

One domain in which inclusive fintech lending is still ideal-typically, albeit misleadingly, linked to the notion of an investment is the booming pay-as-you-go 'solar home system' business across Africa, through which debt-funded solar panels and battery kits bring electric supply to households that are not connected to mains electricity. Instalments are paid by mobile money, and the companies receiving them have the power to turn off the lights automatically after missed payments. These arrangements are framed by promoters and donors as off-grid infrastructures for inclusion and empowerment (Cross and Neumark 2021). They are marketed to families as opportunities to use staggered digital payments to invest in systems which they will eventually own, with added benefits such as allowing schoolchildren to study deeper into the night.

In reality, the financial structures created by the home solar industry are designed to draw households further into expanding cycles of debt dependency through judiciously offered inducements to upgrade to more extensive and aspirational electrical systems – powering more lamps and devices, eventually a TV – via ever-larger loans. In this way, as Ojong (2025) explains,

[12] A recent Reserve Bank of India proposal would, if implemented, restrict this practice only to smartphones bought on credit (Whitehouse 2026).

> solar companies strategically couple consumer desire for new devices with a payment mechanism that entrenches financial obligations. On the one hand, acquiring a TV appears empowering: an expansion of energy-driven possibilities beyond basic lighting. However, this bundling also deepens dependency on the company's payment structure. Missing installments not only interrupts the enjoyment of the TV; it can also disable devices already paid for. (p. 116)

As a result, the electric autonomy that families gain "is conditional and easily withdrawn, as non-payment translates immediately into disconnection" (*ibid.* p. 117). The promise of electric light from a visible 'modern' installation on the roof harnesses households' sense of aspiration, while the insidious power of the remote lockout mechanism leverages the public shame people feel when the neighbours see their lights go out. Consequently, users also critique the costliness, unreliability and exploitativeness of these arrangements, and at times tamper with the systems (Cross and Neumark 2021). In the absence of reliable state provision, alternatives are scarce.

Thus, building on unequal patterns of provision of basic infrastructures that reach back to colonial times, the solar debt industry not only converts unmet energy needs into fintech-enabled returns for remote investors, which are stabilised by households' multifarious efforts to avoid being locked out from their own energy supply; it also produces intricate data streams (kilowatt-hours, payment metadata, user behaviours) that, in turn, become assets within Africa's wider fintech ecosystem (Ojong 2025: 109-11). In all, from nanoloans to solar-powered debts, fintech in the Global South has become an integral part of the transnational digital-financial structures that have brought new forms of digital discipline and extraction into people's daily lives and made household indebtedness a "macroeconomic and institutional phenomenon intrinsic to contemporary capitalism" (Natal & Guérin 2026: 6).

## 4. The state re-enters

Any understanding of fintech in the Global South would be incomplete without the role of the state. The increasingly activist stance taken by many governments in digital financial inclusion agendas contrasts with how microcredit – the poster-child of neoliberal, market-based development – was explicitly premised on a logic of private provision via for-profit lenders and entrepreneurial self-help by impoverished people, modelled on the neoliberal template of 'free' financial markets (Bateman 2013; Mader 2015). States did, in reality, deploy public money and public policy power in huge quantities to foster microfinance, beginning with microcredit's insertion into Structural Adjustment Programmes as a "political safety-net" to stave off resistance against liberalisation and austerity (Weber 2002), but this involvement of

the state was always hidden behind the public representation of microfinance as a private sector-led response to poverty in the Global South.

Microfinance primarily addressed a space left open by the state: demand for credit where public provision systems were retrenched, government-supported jobs and credit schemes were being cut, and where populations had not even been meaningfully supported even by the pre-neoliberal state in the first place. Digital financial inclusion, by contrast, has been far more thoroughly infused and driven by the political and financial power of states, and in more explicit ways, reflecting the wider resurgence of "state capitalism" (Alami and Dixon 2024) in the Global South.

### *a. Creating the playing field for fintech*

Fintech and inclusive digital financial services are ascendant on a field where the enabling conditions have been purposively created through government policy. For instance, sub-Saharan Africa is littered with "regulatory sandboxes" (Junior et al. 2024) where governments expressly refrain from enforcing normal regulation (such as consumer protection rules) in order to allow experimentation and intensified risk-taking, in order to drive innovation and build – or capture – new client bases (*cf.* Brown & Piroska 2022).

In another example of how deliberate government intervention has shaped digital payment markets, Kenya's political elites used various political means throughout the 2010s, such as licenses, favourably targeted regulation, and government-orchestrated collaborations with banks, to allow Safaricom's M-Pesa to become a quasi-monopolist (Tyce 2020). This may have helped drive mobile money's rapid growth in Kenya by preventing the development of parallel payments systems. (Kenya's government also, notably, owned a 35 percent minority stake in Safaricom.[13])

In India, meanwhile, a huge range of government measures have pushed citizens to use digital financial services since the ascendancy of Narendra Modi as Prime Minister, ranging from the creation of nationwide banking access programmes (above all Pradhan Mantri Jan Dhan Yojana, PMJDY) to the declaration of cashless "digital villages" (Cnaan et al. 2021). Among these measures, the most dramatic was the government's sudden invalidation of all larger-denomination Rupee notes in November 2016. This overnight 'demonetisation' was initially

[13] In late 2025, a sale of shares to Vodacom was announced, which would bring Vodafone's share to 55 percent, lowering the government's stake to 20 percent (The Kenya Times 2025).

officially justified by Modi as an effort to curb criminality and tax evasion, but was subsequently rebranded – garnering loud applause from the fintech industry – as a radical but necessary intervention to shift India away from cash. It ultimately, however, failed to accelerate adoption and usage of non-cash payments and banking methods, whilst also massively disrupting economic activity and even causing numerous deaths and a spike in domestic violence cases (Daya and Mader 2018).

### *b. States as active agents of fintech*

States are increasingly also becoming active agents themselves as direct providers of digital services and infrastructures. Kenya's government in 2022, for instance, launched a state lending programme to offer small digital loans for personal and business purposes. Officially called the Financial Inclusion Fund – unofficially the "Hustler Fund", in line with "hustler-in-chief" President William Ruto's "hustler populism" (Lockwood 2023) –, this digital credit platform incorporates credit scoring techniques that are analogous to those used by commercial mobile credit platforms M-Shwari and Fuliza (both linked to Safaricom). Despite surface similarities to commercial digital credit, however, Hustler Fund users appear to see these loans more as clientelist arrangements with the Ruto government than as 'true' loans, as indicated by non-repayment rates in excess of 68% (Chome & Willis 2024; Mwesigwa et al. 2026).

Meanwhile, state-led efforts to reshape payment infrastructures are central to ongoing monetary digitalisation. The Indian government's PMJDY universal bank accounts scheme (since 2014) has been delivered almost exclusively through public sector banks and has digitalised money through its fusion with the Aadhaar digital ID system and mobile phones. The "Jan Dhan-Aadhaar-Mobile trinity", or "JAM Yojana", alongside the government-led RuPay payment card, has pushed the majority population toward digital payments by rerouting all government welfare payments onto digital rails.

India is also among the growing number of governments that have created centralised digital payment systems under the government's aegis, among which Brazil's PIX system is perhaps the best-known (Aurazo et al. 2024). Operated by the central bank, PIX handles transactions between accounts at any bank within seconds, is free to use, and since 2020 has been adopted by the vast majority of Brazilians, fostering subsequent ambitions by the central bank to launch a Central Bank Digital Currency (Deos & Ultremare 2026). Elsewhere, initiatives such as the South African Reserve Bank's "Vision 2025" strategy and its Rapid Payments Programme also aim to build real-time, low-cost payment systems, often in collaboration with private financial

actors (De Masi 2023 a: 9-10). This entry of governments as providers of cheaper, centralised services in the digital payments space – which previously in many countries was the exclusive territory of private companies earning high profit margins – has engendered ambivalent responses from thought-leaders of the financial inclusion industry (Porteous 2025), and even led MasterCard and Visa to complain to the US government about India's promotion of the RuPay card (Reuters 2021).

### *c. The public interest?*

The big data systems underpinning fintech tend to reinforce market concentration, since the high fixed costs of data infrastructure and specialised technical labour favour large firms and enable the corporate centralisation of financial, informational and political power. This makes conflicts over the control of the fintech space between the private sector and government (and different factions of government) almost inevitable. However, the rapid ascendancy of the global agenda to construct what is called 'digital public infrastructure' (DPI) also suggests a new pattern in which the public and the private – and financial and tech – agendas in this space are increasingly merging.

DPI fuses the promotion of digital IDs, digital payments and data-exchange systems into a single developmental agenda item, which is heavily being promoted by a coalition of transnational public and private development donor bodies[14] as well as the Indian government (proudly exporting its own aspirational, technoscientific approach to statecraft; Sajjanhar 2025). DPI is conceived of as constructing a set of large, society-wide digital applications to make governments more efficient, reduce corruption, expand welfare systems and further social inclusion.

Inherently, DPI represents a set of expensive technological investments for governments, which usually depend on private providers of technological hardware, software and services for delivery. It also reframes (often privately owned or run) digital data, ID systems and financial services as *public* goods. Mazzucato et al. (2024) have therefore rightly asked "what is 'public' about DPI?", arguing that public value maximisation from infrastructure requires a strong orientation toward the common good and democratic governance, and citing Brazil's PIX as a

[14] Including the World Bank, UNDP, and major tech sector-linked philanthrocapitalist foundations.

good example of public value delivered effectively through finance-technical infrastructure governed in a participatory way.

In the hands of undemocratic or authoritarian governments and unaccountable private sector actors, however, DPI is liable to bring amplified surveillance and extraction when user and citizen data flows more seamlessly between corporations and governments and when digital IDs gatekeep people's ability to pay for things or access services. One case study of the risks that arise wherever data-driven governance meets private fintech was the management of the South African social grant distribution system by private fintech provider Cash Paymaster Services. This arrangement preceded the 'DPI' moniker but would nowadays be counted *prima facie* as DPI. CPS had access to over ten million beneficiaries' accounts and biometric data (the system was re-nationalised after 2015), which was used not only to market loans and other products, thus contributing to widespread over-indebtedness, but also to routinely deduct payments from welfare recipients. These very poor – and mostly Black – social grant recipients usually found themselves powerless to challenge system-generated errors which would send their families into deeper impoverishment (Bateman & Teixeira 2022; Torkelson 2026).

One consequence of the high price tag of DPI that is already apparent, and that is being amplified by the desperate fiscal situation of many African governments, is an orientation among governments towards using the payments data generated by mobile money and other popular fintech applications to bring more low-income people into the tax net and push small enterprises into formality (Ogembo et al. 2025). Turning digital financial services into a fiscal dragnet is not only potentially highly regressive, it also draws African governments' attention away from incipient efforts to more directly tax digital services (Hearson et al. 2024). However clumsily some recent taxes on mobile money may have been designed and implemented – for instance, Ghana's 'E-levy' was repeatedly reconfigured before having to be dropped (Abounabhan et al. 2026) – these had at least directly sought to taxing the revenues of the fintech and mobile money industry, as that rarest of tax targets in Africa: a highly profitable, non-natural resource-based industry (Mader et al. 2022). Governments in lower- and middle-income countries would be well advised to keep their attention focused on the profits extracted by mobile money and fintech, and seek ways to tax these more effectively, rather than targeting lower-income people for more taxes via their digital payments data. Notably, Safaricom was Kenya's top taxpayer for 13 consecutive years, contributing one-tenth of state revenues in 2016

(*ibid.*: 496), in spite of having artificially decreased its Kenyan profits through payments to Vodafone (UK) for the intellectual property underlying M-Pesa (Foster 2024).[15]

## 5. Conclusion

This chapter has evaluated the rise of fintech and digital financial inclusion on the wider poverty finance landscape by considering how finance and technology 'include' low-income people in ways that often deepen their impoverishment. As we have seen, people in the Global South who access for-profit digital financial services enter into arrangements with financial institutions owned by faraway investors, operated by national and socio-economic elites, and (when digitalised) governed by unaccountable algorithms.

Fintech in the Global South may be fuelled by promises of empowerment, economic advancement, and development, but these promises must be assessed against the wealth of mixed, inconclusive and often negative evidence about the impacts of poverty finance for impoverished people, including land loss (in Cambodia), qualitative and quantitative studies failing to prove positive economic or gender impacts, and even borrowers' own fights against poverty finance. The promises must also be squared with the reality of data extraction and surveillance, algorithmic discrimination, revenue extraction, financialisation of poverty, and chronic digital indebtedness driven by fintechs as payment providers and debt issuers. Lastly, while the promises of fintech to drive inclusion have mobilised states to act, this raises both concerns about digital authoritarianism and unjust taxation as well as hopes that governments may step in to reorient financial-technical infrastructures for better serving the public purpose.

There are, of course, also many instances in which lower income households have managed to kick-start or seek to expand an income-generating activity with (digital) credit. These anecdotes often are used by the poverty finance lobby to suggest individual-level credit is superior to more 'traditional' macroeconomic tools for inducing economic development. However, the belief that individual debt-funded entrepreneurship could propel societies out of impoverishment ignores the fundamental reality that informal economies lack sufficient purchasing power to sustain the growth of many enterprises (Bateman 2013). As a result, the

[15] Foster's work documents how the Vodafone Group structured the intellectual property associated with M-Pesa – trademarks, patents and the copyright embedded in the software – to generate financial transfers between Safaricom (Kenya) and Vodafone Group totalling around €170 m over the 2010-2019 period. He comments: "[t]he extent of these service fees might also be surprising given […] the origins of M-Pesa as part of a development project."

debt service to the financial inclusion oligopolies often overstretches the economic returns from the entrepreneurial activity, such that many entrepreneurs exit again and poverty finance ends up being used to pay for consumption, thus creating dependency. Recognising these inherent limitations to the approach of pumping further debt into already-impoverished spaces necessitates a radical rethinking of what fintech can achieve and how it ought to work, so that its neo-colonial extractive and fundamentally unequa(ising) qualities can be overcome.

All technologies are shaped (and distorted) by the economic and social relations they are embedded in, and as such, technology can be alienating or liberating. Alternatives to fintech as we know it are possible, where the technologies that have manifested in fintech-as-we-know-it are redirected towards the satisfaction of human needs in lower- and middle-income countries, instead of facilitating extraction and driving impoverishment (see chapters ten and eleven). As noted above, states' renewed involvement in the fintech space points to the potential for publicly owned and publicly minded infrastructures to deliver more benign or transformative forms of inclusion. Public digital payments infrastructures without profit motives, transaction fees and debt-promotion incentives, such as PIX in Brazil and Bre-B in Colombia, or community-owned fintechs, such as Brazil's Mumbuca Bank or platform financial cooperatives in Africa (see chapter 11), represent steps in this direction. Notably, PIX is also explicitly motivated by a desire to reduce geo-economic dependency on the US and rent extraction by US payment oligopolists (such as VISA and MasterCard). Taking such insights further, Central Bank Digital Currencies could also play a positive role if they are designed to complement rather than eliminate cash payments (which would again increase dependency on digital oligopolies). To be clear, the renewed agency of the state should not be about governments simply taking over from private actors and pushing people onto digital platforms and systems, but rather about creating transformative public digital alternatives whilst keeping non-digital channels open.

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