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Platform Cooperatives and Poverty Eradication: Building on the Legacy of Johnston Birchall

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ABSTRACT

Johnston Birchall made tremendous contributions to research on cooperatives, including the contributions cooperatives can make to tackling poverty. His work on this subject was largely carried out at a time when the Millennium Development Goals were the touchstone for global efforts to address the needs of the world's poorest people. Since then, not only has the global economy been affected by digitalization, financial crises, climate change, and pandemics, the discourse on poverty has also changed due to the promulgation of the UN Sustainable Development Goals. An example of this is the connection between digital inequality and poverty. Our objective in this essay is to distill the key contributions of Birchall's work on cooperatives and poverty, position them within the evolving context of multi-dimensional global poverty and the platform economy, and chart a path forward for future research that can continue their development. We first identify Birchall's four key takeaways from his research on cooperatives and poverty reduction. We then introduce the distinguishing features of corporate platforms and summarise prior research on the link between the platform economy and poverty. We then turn to the core part of our essay, which focuses on tracing the rise of platform cooperatives and assessing whether the four takeaways fit cooperatives operating in the context of the platform economy. We identify points of convergence, and areas for further refinement and future research. We hope that this will encourage research on the potential contribution that platform cooperatives can have in addressing poverty and other societal challenges.

KEY-WORDS

PLATFORM COOPERATIVES, COOPERATIVE GOVERNANCE, POVERTY, DIGITAL INEQUALITY

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1. Introduction

While significant progress had been made towards eradicating poverty in recent decades, the onset of the COVID-19 pandemic has altered this trajectory. The pandemic resulted in more people being susceptible to poverty, with these consequences being felt disproportionally around the world (Quibria, 2021). In its recent progress report on the Sustainable Development Goals, the United Nations General Assembly (2021: 8) solemnly captured this dynamic when noting that "COVID-19 has led to the first rise in extreme poverty in a generation" while projecting that the world is poised to miss its poverty reduction targets. Continued effort, therefore, is required to position us to eradicate poverty once and for all, particularly in the Global South.

Researchers and policy-makers have long wrestled with how best to conceptualize poverty. While some adopt a more narrow conceptualization, focusing on financial deprivations like a lack of access to a minimum amount of income, others adopt a multidimensional conceptualization that also focuses on non-financial deprivations like a lack of access to education, housing, or medical care (Thorbecke, 2013). A strand of research that has received much attention focuses on reducing poverty through practices grounded in market dynamics (McKague and Oliver, 2012), such as the creation and cultivation of cooperatives (e.g., Kwapong and Hanisch, 2013; Cheney et al., 2014). In contrast with their investor-owned peers, cooperatives prioritize adding value to their members, who own and govern the cooperative (Michaud and Audebrand, 2022).

Among his many contributions to research, policy, and practice, Johnston Birchall made a momentous contribution to our understanding of whether, how, and under what conditions cooperatives can contribute to poverty reduction. Alongside his frequent collaborator, Richard Simmons, Birchall undertook a set of large-scale empirical studies on these topics (Birchall, 2003; 2004; Birchall and Simmons, 2009). As we elaborate in this essay, these studies generated a robust set of takeaways about the connection between cooperatives and poverty. For example, he found that cooperatives could help reduce poverty by overcoming various deprivations and that a critical way in which they can do this is by enabling participatory development. These takeaways have made a major contribution to our understanding of how governments, multilateral organizations, and—most importantly—the poor themselves, can help reduce poverty through cooperatives. Yet, crucially, these takeaways were all articulated before the rapid growth of the platform economy.

Alongside and preceding the pandemic, we have seen monumental changes in the global economy, perhaps most notably due to the rise of platforms like Uber and Airbnb and the attendant dynamics of platform capitalism (e.g., Srnicek, 2017; Vallas, 2019). Platforms differ from traditional Fordist industrial firms in many different ways, notably when it comes to their reliance on data to incentivize persons to join both sides of their platform and their reliance on ever-larger network effects. While our understanding of the impacts of the rise of platforms on poverty is nascent, initial research points to a variety of problematic impacts, including making housing scarcer and more unaffordable (Sridhar, 2022) and exposing workers to unsafe, potentially dangerous environments

(Khetisa, Tsibolane and van Belle, 2020). These negative effects fall disproportionately on vulnerable communities, such as migrants, who may have little option beyond remaining in exploitative conditions (Tandon and Rathi, 2022; van Doorn, 2023).

In response, we have seen the relatively nascent rise of cooperative alternatives to corporate venture-capital-backed digital platforms that seek to overcome these limitations by conferring financial and control rights to workers and other stakeholders, thereby enabling them to set their own pay, working terms and conditions (Scholz, 2016; Bunders et al., 2022). This "platform cooperativism" movement seeks to harness the capacity of cooperatives to create decent work and reduce poverty, qualities that have already been recognized at the multilateral level (United Nations General Assembly, 2021; European Economic and Social Committee, 2022). Yet, our understanding of platform cooperatives and their potential contributions to goals like poverty reduction is almost non-existent (Mannan and Pek, 2021). In this essay, we seek to contribute to this void by distilling the key contributions of Birchall's work on cooperatives and poverty and positioning them within the emerging context of global poverty and the platform economy.

We begin by synthesizing Birchall's corpus of research at the nexus of cooperatives and poverty and distilling what we see as four key takeaways from this work. We continue by introducing the platform economy, sketching its distinguishing features in comparison to "corporate platforms", and summarizing prior research on the link between the platform economy and poverty. We then turn to the core part of our essay, which focuses on situating the four takeaways we identified in the context of the contemporary platform economy to identify what we see as areas of convergence, necessary refinements, and areas for future research. We see these insights as relevant and generative to a wide and growing body of researchers and practitioners around the world studying cooperatives as part of a concerted effort to tackle pressing societal challenges.

2. Birchall's contributions to research on cooperatives and poverty reduction

Birchall made extensive contributions to our understanding of the role of cooperatives in poverty reduction through his various books, reports, and journal articles. Many of his key insights stem from three major empirical studies, all of which were grounded in a central curiosity about whether, how, and under what conditions cooperatives can contribute to poverty reduction, viewed in a multidimensional way, by "enabling poor people to lift *themselves* out of poverty" (Birchall, 2003: 13). The first, titled *Rediscovering the cooperative advantage: Poverty reduction through self-help* (Birchall, 2003), drew on eleven diverse case studies ranging from dairy cooperatives in Bangladesh to worker cooperatives in Finland to investigate the contributions of these cooperatives to poverty reduction in these contexts. The second, titled *Cooperatives and the Millennium Development Goals* (Birchall, 2004), had a similar overarching focus but included two new directions: a broader focus on development as captured in the Millennium Development Goals (MDGs), and an exploration of whether and how countries incorporate cooperatives into their poverty reduction strategy papers.

It drew on ten case studies, five of which were new and five of which were updated from his 2003 study. The third, co-authored with Richard Simmons and titled *Co-operatives and poverty reduction: Evidence from Sri Lanka and Tanzania* (Birchall and Simmons, 2009), drew primarily on data from two cases—Sri Lanka and Tanzania—to explore in-depth the mechanisms through which cooperatives contribute to poverty reduction, the comparative advantages cooperatives have in this regard vis-à-vis other organisations like non-governmental organisations (NGOs), private firms, and local governments, and the supports they need to fulfil their potential.

In addition to these primary works, Birchall also (co)-authored additional pieces on this topic. Birchall and Simmons published additional research complementing their 2009 report. They published an overview of its scope and objectives in a preceding paper (Birchall and Simmons, 2007), subsequent summaries of their key findings (Simmons and Birchall, 2010; Birchall and Simmons, 2013), and an in-depth deep dive into the historical reform process in Sri Lanka and Tanzania (Birchall and Simmons, 2010). The two also collaborated on a conceptual paper advancing a network perspective on the role of cooperatives in tackling poverty (Simmons and Birchall, 2008), and Birchall (2011) summarised much of his preceding work and introduced five primary ways of conceptualizing cooperatives in developing countries in a chapter in his book *People-centred businesses*.

This collective body of research has expanded our understanding of the relationship between cooperatives and poverty. While the specific insights are too many to summarize in this essay, we focus our attention here on distilling key takeaways spanning these various publications.

The first takeaway is that cooperatives can **contribute to poverty reduction by overcoming various deprivations.** In his 2003 work, synthesizing findings across his 11 case studies, he concluded that cooperatives can make major contributions to improving the quality of work and reducing poverty. Each case study from his 2004 work pointed to specific contributions cooperatives can have to address the MDGs. For example, the development of a cooperative among shoe-shiners in Uganda helped create new jobs and expand members' economic opportunities, contributing to specific targets within Goal 1 (Eradicate extreme poverty and hunger) and Goal 7 (Ensure environmental sustainability). In their 2009 work, Birchall and Simmons found that cooperatives can raise their members' income in a variety of ways. For example, agricultural and fishing cooperatives provide their members with information, training, access to shared resources like fishing boats, and assistance with selling outputs, among other benefits.

The second takeaway is that cooperatives can achieve these contributions to reducing poverty through **participatory development**—an approach to development grounded in empowering communities to participate in assessing and addressing their development-related needs (Connell, 1997). This conclusion spans all three of the core studies. In setting up their empirical context in their 2009 report by discussing Collier and Smith's analyses of poverty traps, Birchall and Simmons highlight the importance of paying attention to how the poor can collectively release the poverty traps they find themselves in. These studies point to myriad ways the poor can leverage the cooperative form given its emphasis on ownership and democratic control by its members. Birchall

(2003; 2004) discusses how cooperatives can help contribute to the World Bank's developmental priorities of empowerment (fostering individuals' ability and resources to influence their lives), security (reducing individuals' susceptibility to risks), and opportunity (facilitating the possibility of escaping poverty). For example, cooperatives can contribute to fostering security by enabling individuals to pool resources and risks. All three studies point to specific examples of these dynamics. Here it is crucial for cooperatives to maintain robust and accountable structures of democratic governance to ensure that they ultimately pursue ends that are aligned with their members' needs and, in so doing, contribute to reducing their collective poverty (Birchall and Simmons, 2009).

The third takeaway is that **cooperatives have comparative advantages** when it comes to reducing poverty through participatory development vis-à-vis other organizational forms that stem from members' ownership and control of their cooperative. This insight spans all three studies, though it is most developed in Birchall and Simmons (2009, see also Simmons and Birchall, 2010 and Birchall and Simmons, 2013). Birchall and Simmons (2009) synthesize prior research and data from their study to distil key similarities and differences between cooperatives and NGOs, local governments, and private firms. They argue, for example, that cooperatives perform particularly well when it comes to surplus distribution, ability to create wealth, and ability to scale. These benefits are grounded in general advantages inherent in the cooperative form that apply to all types of cooperatives. Additionally, each type of cooperative also has particular advantages. Consumer cooperatives, for example, have the particular advantages of enabling members to preserve their incomes by selling high-quality products at a lower price.

The fourth takeaway is that cooperatives' contributions to poverty reduction are amplified when they are able to develop mutually-beneficial and arms-length relationships with other public and private entities. First, it is crucial to carefully delineate the relationship between cooperatives and governments. Birchall's various works frequently touch on the somewhat tense relationship between cooperatives and governments throughout the history of cooperatives in developing countries. In tracing the history of cooperatives in developing countries in across three distinct periods-colonial, nationalist, and structural adjustment/cooperative reform—Birchall and Simmons (2010) discuss how several governments began to exert significant control over the governance of cooperatives, curtailing their autonomy to act in the best interests of their members. This contributed to some scepticism on the part of multilateral organizations like the World Bank towards cooperatives as a means of fostering development (Birchall, 2003). Birchall (2011) ultimately concludes that the most appropriate model for cooperatives is the "economic association model", which centres on securing cooperatives' independence from governments and donors and emphasizes cooperatives' contribution to poverty reduction through providing its members with economic benefits. The role of governments ought to centre on "earned autonomy", whereby governments focus regulatory efforts on maintaining the integrity of the cooperative as a legal form and provide an enabling context for the growth and development of cooperatives (Birchall and Simmons, 2010: 481). Second, it is important that cooperatives network and develop partnerships with other organizations. Cooperatives,

particularly smaller primary ones, can end up being disconnected from other organizations that can provide critical support (Birchall and Simmons, 2009). Simmons and Birchall (2008) highlight how networking has long been a part of the cooperative economy and the cooperatives should not use their autonomy to isolate themselves. They emphasize the importance of cooperatives cultivating strong relationships with other cooperatives and with organizations like multilateral institutions in a manner that allows them to protect their autonomy. As a consequence, they maintain a degree of wariness about the role of states in such networks.

3. The rise of the platform economy and its impact on global poverty

A new, but important, domain that bears relevance for efforts at poverty reduction is the platform economy. The platform economy alludes to a sector of an economy in which exchanges of goods, services and information among peers are intermediated through, and by, digital platforms (Acquier, Daudigeos and Pinkse, 2017). As intermediation is a key function and purpose, these platforms rely on the generation of *network effects*, which requires the careful data-driven calibration of the number of users and suppliers on both sides of a platform. Thus, *platform* is a polysemic term that refers to a business model, a technological *stack*, and even a "distinctive form of economic activity" that is related to but different from markets, hierarchies and networks (Vallas and Schor, 2020: 274). Digital platforms, in particular, are typically websites or smartphone applications deployed and controlled by capital-managed firms. Not only are platform firms among the most valuable publicly traded companies (Kenney, Bearson and Zysman, 2021), they are globally ubiquitous.

At the turn of the millennium, the most notable digital platforms were early e-commerce platforms (e.g., Amazon, Alibaba). In the past 15 years, the platform economy has grown to encompass social media (e.g., X, WeChat), online remote labour (e.g., Upwork, Fiverr), online crowdwork (e.g., Amazon Mechanical Turk, CrowdFlower), ride-hailing (e.g., Uber, Didi Chuxing), short-term rental (e.g., Airbnb, Roam), home care (e.g., Care.com, UrbanCompany), and food-delivery (e.g., Deliveroo, Swiggy), among many others. Indeed, even brick-and-mortar businesses with traditional pipeline business models—i.e., businesses that transform goods into a final product through a linear process—are developing digital platforms (Cohen, 2019). Kenney and colleagues observe that a growing number of traditional companies are being absorbed within the platform economy, with 70% of service industries affected in some way by platforms (Kenney, Bearson and Zysman, 2021). These corporate platforms have key differences from Fordist industrial firms.

3.1. Distinguishing features of corporate platforms

There are three main features distinguishing corporate platforms from Fordist industrial firms. The first is that they require *data* to be able to incentivze persons to join both sides of their

platform and, in turn, earn income by taking a fee from the facilitation of transactions or by helping businesses personally target advertisements. This complex process requires personal identification and demographic data (e.g., age, gender), granular data about users' and workers' preferences and tastes, as well as aggregated personal and non-personal data. A growing set of invasive techniques—from the use of sensors to facial recognition—are used to obtain this data (e.g., Chan and Kwok, 2022), which in some cases violates personal data protection and privacy laws, but at a more abstract level, reflects the essentiality of surplus value extraction from user data to generate revenue for corporate platforms.

Second, platforms strategize to blur and mischaracterize the *identity* and *status* of their users to achieve ideological control (Pignot, 2021; Mannan, 2022). A platform user often performs several roles online (i.e., the dynamic performative aspect of a status), including as a worker (e.g., freelancing), as an entrepreneur (e.g., selling second-hand books), and as a consumer (e.g., buying items), and platforms seek to exploit this. By presenting the internet as being a domain somehow different from the "real world", one characterised by collaboration and boundless opportunity (Rushkoff, 2002), corporate platforms can claim that, for instance, an asymmetric working relationship is an equal, mutually-beneficial relationship. This also creates confusion about the nature of a user's relationship with a platform. Platforms discursively present themselves as technology companies acting as neutral facilitators and collaborators, interpellating users through misleading descriptions of the status they hold online (Pignot, 2021). In short, ideological control of users is exercised through this discursive practice. This discursive practice has been a leitmotif in the myriad legal suits against ride-hailing and food-delivery platforms, with disputes turning on whether drivers/ couriers are self-employed or workers. Platforms financially gain from this ideological control as users become willing to simultaneously give a substantial share of their income to the platform as a fee for helping to find clients, while also consenting to surveillance and coercive management. This is a departure from the earlier trend, at least in industrialized countries, towards formalizing reciprocal obligations through employment contracts (Charbonneau and Seifert, 2017).

The third distinguishing feature is the manner in which platform firms are *financed* and, in turn, contribute to *financialization* of the wider economy. Venture-capital-backed corporate platforms embody a distinctly "Californian ideology", a form of neoliberal governmentality which liberally combines convivial communitarian counter-culture rhetoric with high-risk, high-reward entrepreneurship (Barbrook and Cameron, 1996). Venture capitalists accept the risk that several of their investments will fail but also expect that the few that succeed will experience astronomical growth and achieve a level of market dominance, ultimately leading to a profitable initial public offering or lucrative business sale (Mannan and Schneider, 2021). It is through such exit strategies that venture capital investors manage to recoup some of their losses and earn a profit. This investor logic, when combined with the platform business model's need for ever-larger network effects, generates a drive for operational scale and planetary expansion (Munn, 2019); an imperialistic tendency which contributes to the flattening of geographical differences, the occasional tipping of markets, the deregulation of protected industries, and the marketization of new domains of people's lives (Grabher and König, 2020; Lehdonvirta, 2022).

3.2. The impact of corporate platforms on poverty

As can be seen from the previous subsection, the platform economy has transformed into a truly global phenomenon. Though the platform economy may have gained popular attention due to "superstar" corporate platforms operating in the Global North, these platforms have expanded their operations to the Global South and, indeed, are now rivalled by domestic competitors. It is worth noting that, for example, China has the world's largest online food delivery market, estimated at 46.5 billion USD in 2017 (Lei, 2021: 280). The traditional understanding of the "digital divide" between the Global North and poorer countries of the Global South was that digital technologies were inaccessible, poorly adopted or user-unfriendly (Heeks, 2022). However, given the booming platform economy in the Global South, this explanation loses some of its narrative purchase (Graham, Hjorth and Lehdonvirta, 2017; Mannan and Pek, 2021). While concerns about digital exclusion remain, a growing concern now appears to be *how* impoverished communities in the Global South are included.

This is because it appears that corporate platforms have an *ambiguous* impact on reducing poverty. On the one hand, they create new work and entrepreneurship opportunities that are accessible to a wider range of people, from those based in rural areas to persons with disabilities (Johnson, 2019; Lin, Zhang and Yang, 2019; Wang, 2020). In a study with over 100 interviews and over 500 hours of ethnographic observation of the user-generated video content streaming platform Twitch, it was found that the "negatives" of streaming work on a corporate platform for persons with disabilities (e.g., long working hours, stress) were outweighed by the positives (e.g., accessibility, ease of earning substantial income, sense of fulfilment, and creating a community). On the other hand, they also create new forms of exploitation and repression, as discussed in section 3.1. Given these ambiguous effects of engaging with platforms (and the digital economy more broadly), Heeks (2022) argues that people in the Global South are subject to "adverse digital incorporation". This is defined 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" (Heeks, 2022: 4). Among several causes, disproportionate value can be extracted due to asymmetries in who gets to design a platform (i.e., design inequality), who gets to access a resource (i.e., resource inequality), and the extent to which actors depend on one another (i.e., relational inequality). We provide some examples of this ambiguous relationship below, with reference to specific types of platforms, and show how the distinguishing features of these platforms contribute to disproportionate value extraction for the benefit of more-advantaged groups.

In terms of short-term rental platforms like Airbnb, some scholars have suggested that they can create new sources of income for local communities in countries like South Africa (Sonwabile, 2018), yet its main benefits have been for those from a wealthier class who have rooms spare to rent and are perceived as being safe hosts (Clausen and Velázquez García, 2017). These platforms sometimes clash with local customs on hospitality, preventing the platform from taking root at all (Hati et al., 2021). Moreover, based on recent experience in India where the density of Airbnb

listings in Indian cities was found to have a significant effect on both local rent and housing prices, we can surmise that the penetration of such a platform may make housing more unaffordable (Sridhar, 2022). Thus, the growth of short-term rental platforms contributes to the financialization of housing by transforming it into an asset to profit from, instead of making housing more affordable and accessible.

When it comes to digital labour platforms, their emergence, at first blush, was seen as a boon for impoverished persons working in the informal economy, many of whom are migrants and/ or women (Zhou, 2022). Particularly following the onset of the COVID-19 pandemic, migrant workers in countries like India experienced a collapse in their income while also being excluded from crucial social and health services (Tandon and Rathi, 2022). The availability of a digital labour platform that caters to, for instance, domestic work, is potentially valuable as it provides such migrants access to income opportunities, even in the absence of local networks that can refer job opportunities (Tandon and Rathi, 2022). In spite of these advantages, these digital labour platforms present significant challenges to the poor. They require ready access to smartphones and expensive data bundles, not to mention high levels of digital literacy. Even where those are available, platform labour additionally exposes these workers to unsafe, potentially dangerous environments (Khetisa, Tsibolane and van Belle, 2020). While these platforms provide access to new sources of income, they are by definition unstable and require the workers to shoulder substantial risks and costs. Relatedly, both remote and local digital labour platforms use data-from the frequency of keystrokes to geolocation data-to control and discipline users who find work through these platforms (Kellogg, Valentine and Christin, 2020). This data harvesting serves to benefit corporate platforms as a more-advantaged group, given that it enables them to provide a more "efficient" service, rather than enabling less-advantaged groups such as platform workers and users to benefit from aggregated data in new ways.

Finally, corporate platforms have also impacted farming. Agricultural finance platforms are touted for their ability to provide low-cost credit to poor borrowers and open up new markets, yet in doing so they extract valuable data and occasionally sell them to financial institutions, thereby paradoxically lowering the credit worthiness of these same borrowers should they default (Heeks, 2022). Again, this serves the interests of more-powerful actors, such as financial institutions, to the detriment of impecunious borrowers.

Corporate platforms do not provide a clear, conclusive path towards poverty reduction and, in many cases, create new challenges. If adverse digital incorporation is the major factor behind the persistent digital inequalities that characterise impoverished contexts, how can digital incorporation be made more advantageous? In our view, alternative ways of owning and governing platforms can provide a basis for more advantageous digital incorporation. We turn to this in the following section.

4. Platform cooperatives and poverty reduction: Applying and expanding upon Birchall's contributions

In the preceding section, we discussed how corporate platforms do not provide a meaningful way out of poverty and, instead, exacerbate certain forms of precarity and exploitation. First, we briefly recap the rise of platform cooperatives. Second, we distinguish platform cooperatives—particularly platform worker cooperatives and multi-stakeholder platform cooperatives—from the variety of traditional cooperatives that Birchall researched. Third, we bridge the insights on poverty from section 2 to the context of platform cooperatives operating among impoverished communities, so as to highlight areas of convergence and diverge with Birchall's research. In the course of this analysis, we also reflect on future research directions.

4.1. The rise of platform cooperatives

Platform cooperativism as a movement seeks to apply internationally recognized cooperative principles to the digital economy, particularly in the realms of labour and internet infrastructure, in order to foster digital economy solidarity and to reframe concepts such as growth, innovation, efficiency, and sustainability for the (financial) long-term benefit of the many rather than the few. The idea of platform cooperatives grew out of a series of essays, books, and conferences that provide a vision of how platform cooperatives (e.g., LaZooz, Stocksy), both in terms of challenges and successes (Scholz, 2016; Scholz and Schneider, 2017). The Platform Cooperativism Consortium (PCC) was established by the community-researcher and activist Trebor Scholz to facilitate movement building, though the true momentum for platform cooperativism comes from bottom-up efforts by cooperatives, workers, and their supporters across the globe guided by shared principles and rituals.

The PCC defines platform cooperatives as: "businesses that sell goods or services primarily through a website, mobile app, or protocol. They rely on democratic decision-making and shared platform ownership by workers and users"¹. They can be formed by registering as a cooperative, but can also be created by, for instance, using a limited liability company structure that adapts its bylaws to conform with the ICA Statement and Principles². Thus, this includes cooperatives that self-identify as a platform cooperative—and as belonging to the platform cooperativism movement—as well as those that meet the aforementioned definitional criteria but do not know or associate with the movement (Zanatta, 2022a). Some platform cooperatives have an institutional affiliation with the traditional cooperative sector, while others do not (Zanatta, 2022b).

¹ "What is a Platform Co-op?". Available at: https://platform.coop/ [Accessed: 30 September 2022].

² "Cooperative identity, values, and principles," International Cooperative Alliance Coop. Available at: https://www.ica. coop/en/cooperative-identity [Accessed: 30 September 2022].

While some involve thousands of members, making millions of dollars a year, most platform cooperatives are small-sized, operating across a wide variety of economic sectors from food delivery (e.g., Mensakas) to short-term rental (e.g., Fairbnb) to online streaming (e.g., Resonate). Some directly compete with corporate platforms, while others are active in sectors poorly served by corporate platforms, such as the care for the deaf (e.g., Signalise). The members of these cooperatives are often their workers, but in some cases extend to include their users, end-customers, corporate-customers, hosts or a combination of these stakeholders (e.g., Radish.coop, Fairbnb). As the management of platform cooperatives serves the interests of members as a whole, rather than external investors, the pressure to maximize advertising revenue or transaction fees is balanced with the interests of members as workers (for example). If a surplus is generated, this can be returned to members, proportionate to their patronage of the cooperative (Schor, 2020). This potentially opens a valuable source of income for cooperative members. Particularly in vital, but underfunded, industries like the care sector, cooperatives can enable worker-members to receive fair pay and be treated in a dignified manner. In addition, members generally get a vote on a one member, one vote basis in the strategic decisions of the platform cooperative during a general assembly, with some platform cooperatives allowing for voice even in day-to-day decision-making (e.g., Equal Care Co-op) (Mannan, 2022). Moreover, there are secondary associations comprised of multiple platform cooperatives that enable them to share services ("shared-services platforms") (e.g., Up&Go, Eva, CoopCycle) created to help the platform cooperatives to share costs such as software development (Mannan, 2022). At the time of writing, it is estimated that there are over 500 projects building or running platform cooperatives in more than 33 countries³.

In broad terms, platform cooperatives respond to each of the three distinguishing features of the corporate platform economy discussed in section 3. First, platform cooperatives and shared-services platforms handle the collection, processing, and use of data in a different manner than corporate platforms. CoopCycle, for instance, is a federation of 80 platform cooperatives that provide bicycle delivery services across four continents. The federation develops software that helps the cooperatives to manage deliveries and payments. There are three features of the federation's software that are different from a typical corporate platform. Workers can co-determine the design of the platform and CoopCycle does not collect or process their data. Moreover, CoopCycle provides software with a type of copyleft license—"Coopyleft"—which, among other things, requires that any organization that wishes to use their software must be organized as a worker cooperative and function as a social enterprise (Kasparian, 2022). In this way, platform cooperatives help mitigate the design inequality that exists with corporate platforms by enabling worker and user co-design and by giving them a voice in how their data is collected and used.

³ "Platform Co-Op Directory," Platform Cooperativism Consortium. Available at: http://directory.platform.coop [Accessed: 22 September 2022].

Second, platform cooperatives provide a means for overcoming some of the uncertainty over status and identity by conferring the "master status" of member to its most salient stakeholders. In principle, as cooperatives act in the interest of their members as a whole, it does not seek to benefit from sowing confusion about the status that members hold through practices like opaque data harvesting practices or implementing algorithmic management (Kasparian, 2022). Instead, it seeks to mitigate the relational inequality between more-advantaged parties (e.g., management, end-consumers) and less-advantaged parties (e.g., platform users, workers), by explicitly stating what the rights and duties of a member are, including inspection, voting, patronage, and participation requirements (Mannan, 2022). This allocation of consultation and voice mechanisms can, based on prior experiences of worker ownership, potentially contribute to the good governance of the business (e.g., Blasi, Freeman and Kruse, 2017).

Third, platform cooperatives broadly challenge the financialization of the economy through their distinct financing practices, while still encountering the financing challenges long encountered by cooperatives. There are platform cooperatives that as a matter of principle refuse to accept external investment by non-members, while others do so as long as it does not allow them to control the cooperative (Mannan, 2022). Platform cooperatives such as The Drivers Cooperative, a New York Citybased ride-hailing cooperative, engaged in a successful crowdfunding round and raised over 1.5 million USD, but did not cede control to the non-member investors. Cooperative law also has an important role in deterring speculative venture capital, as in many jurisdictions there are statutory restrictions on accepting external investment (i.e., investment by non-members), investment lock-in requirements, and distribution constraints (i.e., paying no or low return on capital contributions) (Fajardo-García et al., 2017). This is beneficial as it prevents unsustainable growth and provides opportunities for slower, deliberate and participatory interventions in markets such as short-term rental. This can be seen in the contrasting approaches between Airbnb and the Fairbnb cooperative, with the latter passing on a large share of its revenue to community projects and undergoing a process to extend membership to hosts and renters alike (Foramitti, Varvarousis and Kallis, 2020). This allows platform cooperatives to scale deep, by building lasting community relationships and promoting cooperative values (Mannan, 2022), and not just scale out. Nevertheless, these restrictions mean that platform cooperatives often struggle to raise adequate financing to sustain themselves as cooperatives over the long term (Bunders et al., 2022) and compete with corporate platforms. Innovative financing practices that are in keeping with the cooperative ethos, such as the issuance of community shares in the UK, open new sources of capital but still present difficulties in raising the sums that are comparable with investments in VCbacked corporate platforms (Evans, 2020; Co-operatives UK, 2021). Thus, it remains to be seen how substantial their challenge to the corporate platform economy will be in the years to come.

4.2. How platform cooperatives contribute to poverty reduction

In section 2 we identified four main takeaways from Birchall's research on the contributions of cooperatives to poverty reduction. In this section, we will use illustrative examples to evaluate the extent to

which Birchall's insight corresponds with the reality and needs of platform cooperatives. While showing these convergences and divergences, this part will also highlight directions for future research.

When it comes to our first takeaway about how cooperatives contribute to poverty reduction by overcoming various deprivations, there is some evidence about how platform cooperatives can do this. Notably, a number of platform cooperatives focus on job creation and income generation, as well as providing a range of ancillary support services. The Drivers Cooperative had over 4,000 driver-members within two months since their launch and paid its members 30% more than the New York Taxi and Limousine Commission's Minimum Wage (Forman, 2022: 32). Through a partnership with a credit union, The Drivers Cooperative is also able to help drivers refinance car loans at lower rates, thereby helping drivers who have no or poor credit scores and are at risk of being mired in indebtedness (Toussaint, 2021). In India, the Megha Indigenous Women Farmers' Cooperative has over a thousand members and was created in 2014 to connect farmers with the agricultural supplies and training they need. In collaboration with the Self-Employed Women's Association (SEWA) Cooperative Federation-a body created by the SEWA trade union-Megha has initiated digital literacy programmes (e.g., using Whatsapp, Google applications) and has begun co-creating a digital platform to connect these women farmers with stakeholders across the supply chain (Hiriyur, 2022). This was done in a bid to create new work and income opportunities. During the COVID-19 pandemic, the UMTA Kochi Metropolitan Transport Authority launched a platform to hail taxi drivers ("Yatri") and another application to hail auto-rickshaws ("AuSa"), with the "apps" being used by platform cooperatives for taxi drivers and auto-rickshaw drivers respectively. The goal of this initiative was to have drivers join these platform cooperatives and become its employees, thereby guaranteeing a minimum wage, access to a provident fund, and days off, along with a patronage return. As the application was developed by a municipal authority, no transaction fee is charged. This provides considerable job and income security to the thousands of drivers that have joined the platform cooperative till now (Bardia and Scholz, 2022).

Our primary conclusion from this analysis is that certain types of platform cooperatives such as platform worker cooperatives and multi-stakeholder platform cooperatives—contribute to poverty reduction as Birchall found with traditional cooperatives, but they additionally address *other needs of members arising from the digital economy.* This ranges from helping members to collectively negotiate certain benefits (e.g., asset rentals, insurance) to providing training and education in digital skills. Based on this premise, there are several possible directions for future research, with two being mentioned here. The first concerns evidence-gathering about platform cooperatives' contributions to development goals such as poverty reduction. The International Labour Office's statistics on cooperatives do not adequately account for and distinguish platform cooperatives from other types of cooperatives and there is insufficient data on platform cooperatives specifically, in terms of demographic data as well as on "employment, revenue, value-added, assets, liabilities, the use of profits or surpluses, investment and the earnings of workers" (International Labour Office, 2018: 6). The collection of this data can enable further assessment of the contributions of platform cooperatives to local economies and development objectives such as poverty reduction. The second direction concerns the ancillary services provided by platform cooperatives. The ICA's Cooperative Principles recognises the importance of education and training for cooperatives, but future ethnographic research could explore how platform cooperatives distinctively provide training on digital skills and other ancillary services for the benefit of their members.

Turning now to our second takeaway about how cooperatives contribute to poverty reduction through participatory development, there are two particularly important points to emphasize. First, there are several platform cooperatives that enable their members to benefit from member and business data. This is a distinct advantage of platform cooperatives, building on the services that, for instance, agricultural and fishing cooperatives have provided their members in the past (Birchall and Simmons, 2009). Eva, a blockchain-based shared-services platform operational in Canada and Cameroon, enables drivers to have access to performance indicators collected by their local ridehailing cooperative, such as their "cancellation rate and the difference between estimated travel time and actual travel time" (Mannan, 2022: 223). This ensures the maintenance of informational and power symmetry between the driver-members and their cooperative. The Drivers Seat Cooperative takes this a step further by enabling the ride-hailing and delivery driver-members to track their performance on multiple corporate platforms and assess the most productive times to work⁴. These examples indicate how platform cooperatives can empower members to collectively help themselves, from reducing information asymmetries to maximizing earnings, so as to escape poverty. Thus, our main conclusion about this takeaway from Birchall's work in the context of platform cooperatives is that a key way they foster poverty reduction through participatory development is through their novel use of data-by providing new mechanisms for members to access, use, and collectively steward their data, all the while providing them with a voice in how these mechanisms are designed. At the same time, our knowledge of how data is being used is relatively nascent. There have previously been case studies that briefly describe how members can access or use their data, as well as their opportunities for co-design, but opportunities for future research remain. A qualitative study could examine the different approaches to data governance across a group of platform cooperatives and investigate how this data was used by members to improve their material conditions by, for instance, identifying new economic opportunities or protecting against potential risks. Relatedly, there is an opportunity to conduct research on how members have been using this data and co-design opportunities and whether, over the long term, it has affected their activities on the platform, their satisfaction in being a member, and their income generated through the platform cooperative (if applicable). This would contribute to the existing literature on understanding cooperative member satisfaction (e.g., Liebrand and Ling, 2014) and the factors behind cooperative member retention and loyalty (e.g., Hager et al., 2016).

Turning to our second point regarding this takeaway, like traditional cooperatives, platform cooperatives create many opportunities for members to participate in governance processes.

⁴ Available at: https://driversseat.co/ [Accessed: 30 September 2022].

This is often through the use of a variety of third-party digital tools to stimulate participation in building bespoke automated resolution systems so as to allow for issues to be raised and voted upon asynchronously (Stocksy, 2021; Mannan and Pek, 2023). This ensures that platform cooperatives try to remain aligned with their members' needs. However, as with traditional cooperatives (Pek, 2021), platform cooperatives also face numerous challenges in upholding democratic practices as they grow (Bunders et al., 2022). There are likely to be important differences in the causes, dynamics, and solutions to these challenges that could be addressed in future research. There could be ethnographic research on how successful the various digital tools are in allaying specific governance concerns. A qualitative study could examine how distinguishing features of platform cooperatives—such as their distinct approach to data transparency, access, and control—affects member involvement and engagement in cooperative decision-making processes. This would enrich our understanding about how platform cooperatives in particular navigates some of the "paradoxes" of cooperative governance (Michaud and Audebrand, 2022).

In terms of the third takeaway from Birchall's work about cooperatives' comparative advantages, our main comparison is between cooperatively-owned and -governed platforms and corporate platforms, as the nature of the platform economy provides little room for charities and state-owned enterprises. The comparative advantages of platform cooperatives relative to corporate platforms depend on the metrics used to compare them. If the measure is worker pay, then platform worker cooperatives frequently offer opportunities for higher incomes because of how the cooperative charges lower transaction fees to worker-members and distributes surplus. Unlike corporate platforms, members of platform cooperatives such as Stocksy (a global stock photography and video cooperative) not only receive income from the products they sell through the cooperative's online marketplace but also receive returns based on their patronage, should the cooperative enjoy a surplus (Mannan, 2022). Even cooperatives that do not generate such a surplus yet, such as The Drivers Cooperative, are able to offer higher take-home income to their members due to measures such as charging driver-members a lower transaction fee than corporate competitors (Toussaint, 2021). On the other hand, if the metric is market share or business revenue, then corporate platforms are currently ahead of platform cooperatives in the markets they compete directly (e.g., ride-hailing, on-demand food delivery). Without the benefits of large external investments, platform cooperatives are able to spend less on marketing, hiring professionals, developing software, and paying for incentives that would encourage platform switching. However, the prominence of one firm relative to another might change and it is notable that The Drivers Cooperative became one of the largest worker cooperatives in the United States within one year of its launch (Doherty, 2021). Our main conclusion on this takeaway is that platform cooperatives can potentially outperform corporate platforms by some metrics. However, there is scope for further research to substantiate this. For instance, a comparative case study of a corporate platform and platform cooperative operating in the same industry could examine their differences (e.g., in terms of income, in terms of responsiveness), focusing on users'/members' views of these differences and how it shapes their perceptions about each firm. This would illuminate what the real, felt effects of being a platform cooperative member

are, relative to being a user of a corporate platform. It is also possible to undertake such comparisons with specific types of platform cooperatives and corporate platforms. For instance, as the number of platform worker cooperatives grow and firm-level statistics on income and employment become more organised, it will be possible to compare average income and employment retention between these cooperatives and corporate labour platforms. This would add to earlier research on wages and employment in capitalist firms compared to worker cooperatives (e.g., Burdin and Dean, 2009).

Finally, regarding our fourth takeaway about how cooperatives' contributions to poverty reduction are amplified when they are able to develop mutually-beneficial and arms-length relationships with other entities, there are many similarities but some important differences in the case of platform cooperatives. Two enabling conditions identified by Birchall and his collaborators were the autonomy of cooperatives from state interference and networking with other cooperatives and value-aligned organisations. We would refine this by concluding that collective self-help by platform cooperatives is contingent on their participation in an ecosystem of supportive actors instead of operating in *isolation*. This requires striking a new balance between autonomy and cooperation. Platform cooperatives, with the support of the PCC, already engage in sectoral coordination among themselves and collaborate with labour and social movements (e.g., Movimento dos Trabalhadores Sem Teto in Brazil, Service Employees International Union in California), as they can provide the energy, resources, and momentum to form new platform cooperatives and support existing ones. This is necessary as it cannot be assumed that the traditional cooperative movement will be supportive of platform cooperatives, as the recent experience in Brazil demonstrates (Zanatta, 2022b). Platform cooperatives also cooperate with one another out of necessity due to the high costs involved in building software and out of an ideological commitment to creating a software commons shared and managed with other platform cooperatives, as in the case of CoopCycle (Kasparian, 2022).

Moreover, platform cooperatives partner with local governments. In our view, it is possible to avoid the risks of government cooptation, and gain considerable benefits, by placing guardrails on the controlling power of governments. We contend that municipal governments that understand what cooperatives are can be a great support for nascent platform cooperative ecosystems in their cities, by creating new start-up financing opportunities (e.g., through non-controlling shares in platform cooperatives, worker ownership grants) and providing technical and infrastructural support (e.g., paying for cloud server fees), without this compromising member-control (Scholz et al., 2021; Bardia and Scholz, 2022; USFWC, 2022). This support can come in various forms. Legal and regulatory support can range from promoting the cooperative alternative through legislation, as has been proposed in recent draft European Union legislation (European Parliament, 2022), to amending cooperative legislation to accommodate worker cooperatives (e.g., Japan) (Furumura, 2020), to the provision of clear guidelines on when competition law will not be applied to certain sole self-employed people entering into collective agreements and actions (European Commission, 2022). This ecosystem approach is merited given the interdependencies created between actors on different sides of the platform and the value generated through this interdependence. Isolation is not an option for platform cooperatives. In addition to stakeholders such as consumers, citizens,

and other businesses, governments are also important stakeholders due to the significant public and social impacts of the platform economy. Hence, there should be a concerted effort to build interest in platform cooperatives among municipalities across the globe by highlighting the job creation, tax generation, and data governance benefits that platform cooperatives can offer, while also deepening their knowledge of the cooperative principles and the need for cooperatives to avoid permanent financial dependence on the state (Muldoon, 2022). Instead of viewing public authorities with suspicion, the goal should be to foster meaningful partnerships, which can include data sharing on matters of public interest such as transportation (with due privacy-preserving safeguards) (Mannan, 2022). In view of this, there needs to be further research on *platform cooperative ecosystems*. As a complement to new research on digital platform ecosystems (e.g., Hein et al., 2020), long-term case studies of nascent platform cooperative ecosystems at a regional level (e.g., in Kerala, Catalonia, Basque Country) or at a municipal level (e.g., in Kochi, Trivandrum, Barcelona) would be useful for better understanding the interdependencies between various stakeholders and the generation of new forms of social and economic value that no stakeholder would have created in isolation.

5. Concluding remarks

Among his many contributions to our understanding of cooperatives, Birchall, and his colleagues, made impressive contributions to our understanding of whether, how, and under what conditions cooperatives can help reduce poverty.

Yet, this work was carried out at a time when the eight MDGs were the touchstone for global efforts to address the needs of the world's poorest people. The MDGs have now been supplanted with 17 mutually reinforcing Sustainable Development Goals (SDGs) that not only seek to eradicate poverty but have a broader agenda, including the provision of good jobs, encouraging innovation and the building of infrastructure, reducing inequalities and consumption, and fostering sustainable cities and communities. The SDGs are closely attuned to changing global socio-economic conditions and this can be seen particularly through the development of new digital technologies and the cultivation of digital industries; forms of innovation that are explicitly seen as desirable by SDG 9 but a goal that was not present in the MDGs. At the time of Birchall's research, the focus was on how digital technologies were inaccessible to impoverished communities, and while this digital divide continues to exist for 3 billion people on this planet, there is growing attention being paid to how digital technologies are adopted and used. The growth of the platform economy in impoverished locales is one example of these changing circumstances: while providing opportunities, they also present new threats to the elimination of poverty and other SDGs. As in the past, cooperatives can have a role in addressing the multi-dimensional nature of contemporary poverty, but they must be attuned to new socio-economic conditions. Hence, some of the key takeaways from Birchall's work need to be refined to fit the context of the platform economy.

In this essay, we sought to explore this possibility. We did so by, first, canvassing Birchall's (co-)authored work to distill four key takeaways about the relationship between cooperatives and poverty reduction. After introducing the contemporary platform economy, discussing the impact of corporate platforms on poverty, and introducing platform cooperatives, we then critically reflected on these takeaways in the context of platform cooperatives.

Through this exercise, we found that many of Birchall's takeaways resonate with our nascent understanding of the dynamics of platform cooperatives, even if the particular circumstances of platform cooperatives require some modification of his takeaways. Like the cooperatives studied by Birchall, platform cooperatives show promise in reducing poverty in a variety of ways. They have a unique benefit, though, in terms of their ability to overcome deficiencies specific to the digital economy like a lack of digital skills or required assets. Similarly, platform cooperatives contribute to poverty reduction through participatory development, with one novel way they do this being through enabling their members to benefit from their own data, as well as the cooperative's business data. While platform cooperatives, like traditional cooperatives, rely on collective self-help and democratic governance, the former in particular make use of digital tools for both purposes. Unlike the traditional cooperatives studied by Birchall, many platform cooperatives operate in sectors that governments and NGOs are largely absent from. The platform cooperatives compete with corporate platforms or are sole players within a sector. Platform cooperatives-particularly platform worker cooperatives and multi-stakeholder platform cooperatives-potentially have certain comparative advantages over corporate platforms in reducing poverty, such as by improving member pay by charging lower transaction fees and providing patronage returns. Birchall and colleagues advise that cooperatives should be autonomous from government bodies but still should network with other cooperatives and value-aligned organizations. Several platform cooperatives adopt an ecosystem approach, whereby their interdependence with other actors (including government bodies) is accepted and value-generation from this interdependence is acknowledged. In other words, platform cooperatives take a different approach towards balancing autonomy with external cooperation.

These conclusions are relevant to researchers in a variety of domains. Most directly, they are relevant for those studying the role of cooperatives (e.g., Kwapong and Hanisch, 2013; Cheney et al., 2014), particularly platform cooperatives (Mannan and Pek, 2021; Heeks, 2022), in poverty reduction. For example, while Mannan and Pek (2021) argue that platform cooperatives likely have advantages over corporate platforms when it comes to poverty reduction, their work could be buttressed by several of our insights, like the specific enabling conditions we identify and the important role of participatory development. Yet, by spotlighting the various ways platform cooperatives can contribute to poverty reduction our conclusions are also likely to be relevant to those interested in connection between digital platforms and poverty and precarity more broadly (Qureshi, Pan and Zheng, 2021; van Doorn, 2023), as well as those interested in the role of business in addressing poverty (e.g., McKague and Oliver, 2012).

Furthermore, we articulated numerous avenues for future research that will help advance Birchall's legacy in future work, from the collection of statistics to comparative legal research to indepth studies of how members use their individual and collective enterprise data to make governance decisions. We also present a variety of methods that can be used to explore these directions, from surveys and interviews to participant action research. We, therefore, see tremendous research opportunities for those working in one or more of the domains of management, digital platforms, and poverty reduction. We hope that our essay spurs further work on the connection between cooperatives and poverty reduction, and contributes to advancing Birchall's pioneering legacy in this area of research.

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