

# A Common Platform



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# Executive summary

On Tuesday October 20th 2020, the US Department of Justice filed an antitrust action against Google, the first step in what might be one of the biggest anti-monopoly cases of this century. With Google controlling more than an 87% share of the U.S. search market and its parent company, Alphabet, now one of the largest and most valuable companies in history, the move is likely long-overdue. Yet Google/Alphabet is not alone. Just weeks later, the European Commission formally accused Amazon of breaking EU antitrust rules by distorting competition in online retail markets.

At this point, it is relatively uncontroversial to point out that “Big Tech” giants like Google and Amazon increasingly dominate our economies and wield tremendous influence over our culture, social interactions, and political systems. For instance, the “Big Five” – Facebook, Apple, Amazon, Microsoft, Google – represent more than 20% of the market cap of the S&P 500 and companies like Uber, Lyft, Airbnb, and Paypal are all worth tens of billions of dollars.<sup>1</sup> Moreover, as the value of these tech giants has surged during the Covid-19 pandemic, the wealth of their major shareholders have risen to scarcely believable levels. Jeff Bezos, the founder of Amazon, for instance, has seen his personal fortune rise by more than \$73 billion since the start of the crisis to a record of around \$200 billion.

The unprecedented rise of many of these companies is linked to the emergence and proliferation of digital platforms over the past several years. The platform as a business model – in which the product or business is focussed on facilitating interactions between two or more distinct but interdependent sets of users – is not new. What has enabled today’s platform giants to accumulate such extraordinary wealth and power is a combination of the effects of digital connection and anti-competitive action. Boosted by seemingly limitless flows of venture capital (VC), these platforms corporations are increasingly acquiring a dominant position across more and more parts of our economy, from search to online retail and from social networks to mobility services, and using their power to undermine regulations, workers’ rights, and democratic processes. Moreover, this power is consolidated and extended by a key feature of the platform economy: the exponential collection, analysis, and monetisation of data generated by platform users and collected by the platform companies.

This has led to a situation in which a small group of large platform companies – sitting at the heart of the transactions and engagements of the digital, and increasingly, the physical economy – have become the robber barons and rentier giants of our age. Their main focus has become the collection of rent while fending off potential competitors and swatting away regulations and public policies aimed at curtailing their power. Not coincidentally, they are also being linked to numerous negative social, economic, and political outcomes, both independently and in conjunction with collection and use of data.

These include, but are not limited to:

- Increasing economic inequality and the concentration of economic power, which are inevitable outgrowths of the dominant platforms' rentier monopoly position.
- The steady erosion of social and labour protections and the deployment of new, pernicious forms of social and workplace control.
- The deepening of "surveillance capitalism," in which all aspects of life and society are mined for data which is not only bought and sold, but increasingly used to modify and direct human behavior.
- The rise of algorithmic management (and bias), which is hardwiring discriminatory, unfair, and racist outcomes into core features of our economic system.
- The undermining of democratic and civil norms through the proliferation of forms of misinformation and manipulation.
- The use of tax avoidance/evasion and regulatory arbitrage (e.g. shopping for favourable regulatory environments) by platform companies to boost profits.
- Negative environmental impacts, with the digital sphere intimately linked to material landscapes and natural systems.

Yet, if monopoly power in the hands of giant for-profit corporations is producing a series of stark economic and social challenges, there remains extraordinary potential in platforms. As an infrastructure for connecting people to goods and services, platforms can and do provide an enormously useful function and, as Covid-19 has proved, they are indispensable to how we live, work, and play. Moreover, given their collaborative and networked nature, platforms also have great potential to be organised through multi-stakeholder models of governance and ownership, giving suppliers and users of the platform genuine voice and control.

The challenge is to liberate the democratic and enlivening potential of the platform from the logics of concentrated corporate ownership and profit maximisation. Crucially, while platforms have encouraged a sense of technological inevitability, the way that our digital economy is run is neither fixed nor certain. Platforms are legal as much as digital institutions; we can recode both and change how they operate and in whose interests. We can disperse and democratise economic coordination rights currently monopolised by the platforms, ensuring private power is not beyond democratic regulation. Central to this must be a new architecture of ownership and control.

This report outlines the current political economy of platforms and data in the US and UK, as well as key policies, regulations, and legislation in the areas of antitrust and monopoly power, workers' rights and protections, online speech, data privacy and control, and financial technology (fintech), among others. It then presents five foundational principles that we believe should guide a transformative agenda related to platforms and data. These are:

1. **Privacy and anti-surveillance:** Decisions on whether to collect data, what data to collect, and how data can be used should not be left in the hands of private corporations or the state as presently constituted. Rather, new democratic and multi-stakeholder organizations and approaches are needed.
2. **From enclosure to the commons:** Platforms and data should be reconceptualized as public utilities and assets with new public and commons forms of ownership and governance.
3. **Global multi-stakeholder governance:** Any proposals to democratize the ownership and control of platforms and data must take global dynamics into account and es-

establish processes and approaches by which people around the world (and not just in the US and the UK) can meaningfully participate.

4. Reducing corporate concentration and power: Challenging and reducing the monopoly power of Big Tech and platform companies is central, but antitrust strategies should be connected to deeper structural changes in the ownership and control of platforms and Big Tech companies.
5. Increasing public funding: In addition to other government actions to reduce corporate power and increase competition (such as antitrust and regulatory strategies), public funding should be expanded and redirected to support the development of multistakeholder, publicly owned platforms, and other alternatives.

Building on these principles and the existing political economic landscape, this report concludes by offering a menu of policies and solutions that we feel can meet the scale and dynamic of the crises posed by today's data and platform regimes. These include:

- Democratic public ownership of major platforms: In order to sufficiently resolve the natural monopoly and other problems brought on by the dominant platform firms, the US should consider bringing these digital public utilities into democratic public ownership (perhaps in conjunction with its broader antitrust strategy). In the UK, platforms – or particular subsidiaries of platforms – should be regulated as a utility service where they operate under monopoly conditions.
- Central bank digital currency and a postal banking system: The US in particular should get ahead of private platform capitalists and fintech companies by establishing a democratically accountable digital payments infrastructure, including a central bank digital currency and postal banking system as the digital and physical architectures, respectively.
- A 21st century “New Deal” for workers and unions: A new set of labour rights should be introduced to ensure work organised through platform intermediaries is secure and decent. Furthermore, the ability of workers to organise collectively should be enhanced.
- A new multi-stakeholder agency to set the standards and principles for data collection and use: In the US and the UK, a new multi-stakeholder agency or organisation should determine when and how data can be collected, with workers and communities having new rights to collectively determine how data collecting technologies are introduced, including a final say on the introduction and use of surveillance and monitoring technologies in the workplace.
- A network of “data trusts” to provide citizens with access and democratic control over data that can improve their lives: A series of sectoral and place-based data trusts should be established. These autonomous legal bodies would act as custodians and stewards of a specific data set, making sure that the data is shared safely and democratically. Such data trusts could, for instance, be designed to pool transport data or help improve the bargaining power of workers by giving them access to specific data on terms and conditions in their sector.<sup>2</sup>
- Public Platform Accelerator (PPA), National Lab for Community Data (NLCD), and Public Digital Cooperatives (PDCs): The US and UK should direct public funding into the development of data and platforms (and the ecosystem around them) that are decentralized and democratically owned via a variety of new public RD&P (Research, Development, & Production) institutions and approaches.

- National Investment Bank: the US and UK should close the financing gap for platform co-ops and other democratic alternatives via broader transformations of public finance, such as the establishment of a network of public banks led at the national level by a National Investment Bank.
- Digital Community Wealth Building: Towns, cities, and regions should be in the vanguard of charting a new digital future. In conjunction with, or in addition to, many of the proposals suggested above (including data codetermination, data trusts, and the PPA, NCLD, and PDC), local digital Community Wealth Building strategies should be at the forefront of how we reimagine how data is generated and used and how digital platforms and infrastructures are developed and owned – with the overarching goal of seeking to retain and grow value in place.

# 1 Introduction

In the late 2000s and early 2010s, a sense of techno-utopianism pervaded public discourse in both the United States and the United Kingdom, as well as in many other countries around the world. The “sharing economy,” powered by new online platforms (websites, apps, or other digital systems that facilitate connections and matchmaking), was upheld as a way to bring people and communities together in mutually beneficial market exchanges, reduce consumerism, heal the environment, and replace outdated employment relationships and modes of production.<sup>3</sup> Relatedly, social media platforms were going to enhance community cohesion and the free exchange of knowledge and ideas. In 2010, for instance, Rachel Botsman, author of the book *What’s Mine is Yours: The Rise of Collaborative Consumption*, wrote that “the convergence of social networks that make access more convenient and facilitate trust between strangers, as well as pressing environmental concerns and cost consciousness, are shifting us away from the outdated forms of consumerism. Instead, these trends are moving us toward sharing and cooperation enabled by social technologies of a myriad of assets such as gardens, offices and homes to money.”<sup>4</sup>

Ten years on, such statements appear quaint and naive. The sharing economy was, in the words of Janelle Orsi, co-founder of the Sustainable Economies Law Center, quickly “hijacked” by Big Tech corporations and powerful venture capitalists. In the hands of these capitalist actors, the platforms at the heart of the “sharing economy” have become a powerful force driving economic and racial inequality, monopoly and rentier power, displacement and gentrification, workplace precarity, alienation, and social discord, amongst a host of other deleterious, dangerous, and destabilizing outcomes.

For instance, platforms like Uber, Lyft, and Deliveroo have embraced a business model based on misclassifying workers as independent contractors to avoid employment standards, ignoring or willfully violating laws and regulations to gain a foothold in lucrative markets, and running huge financial losses (backed by a bottomless pit of VC funding) in order to undercut competition. Airbnb has essentially turned some residential neighborhoods into hotels and is complicit in spiking housing costs and increasing displacement in cities around the world.<sup>5</sup> Amazon has decimated local economies and businesses by undercutting brick and mortar competitors and deploying sophisticated and “aggressive” tax avoidance schemes.<sup>6</sup> Fintech companies like Robinhood have “gamified” and “automated” economic decisions and exposed

consumers to complex and risky financial instruments (sometimes with devastating personal consequences).<sup>7</sup> And studies have found that social media/advertising platforms like Facebook and Twitter, who monetise attention, have abetted and facilitated rising disinformation, increased social division, and the resurgence of extremist right-wing hate speech.<sup>8</sup> “Sharing was supposed to transform our world for the better,” Susie Cagle writes. “Instead, the only thing we’re sharing is the mess it left behind.”<sup>9</sup>

At the same time, these online platforms (alongside other corporations in various sectors) are continually seeking to generate, capture, and monetize as much data as possible.<sup>10</sup> As Nathan Newman explains, “data has been called the ‘new oil’ of the information age, an asset used by corporations to reshape markets and increase their market power and profits.”<sup>11</sup> While the popular “data as oil” metaphor is misleading, it is relatively uncontroversial that the exponential increase in the collection and analysis of data is key to the business model of many, if not most, platforms and other large technology companies.<sup>12</sup> This has led not only to increasing concerns around data privacy and data theft, but also around the ways in which data is enabling racial discrimination (e.g. algorithmic bias), social control and surveillance (e.g. facial recognition and location data), financialisation, and corporate consolidation, to name but a few. “The increased commodification coming along with big data means social inequality,” Christian Fuchs writes. “There is a ‘big data divide’ that concerns the ownership and control of data and poses advantages for the powerful and disadvantages for the less powerful.”<sup>13</sup>

While some of the early discourse around the sharing economy was undoubtedly naive and failed to account for the realities and relatively predictable outcomes of corporate capitalism, it is important to recognize that parts of the underlying theory still hold. Platforms and data are fundamental and unavoidable components of the modern economy and have enormous transformative potential across a wide variety of sectors and human interactions. There is no going back to a world in which platforms and data do not exist. Rather, the task ahead is to diagnose the failures of the current approach, re-conceptualise data and platforms, embed new values and principles, and visualise how these critical functions and organisations can play a role in the development of a new more democratic, equitable, and ecologically sustainable political-economic system.

## 2 Definitions and terminology

In their purest sense, platforms are essentially matchmaking intermediaries that make connections and coordinate supply and demand between user groups. Platforms generate revenue by monetising the “attention” of its users through selling advertising space to third-party users, capitalising on the data that is produced while the platform is used, charging commissions for facilitating transactions, and/or charging a subscription fee for access to the platform.

Platforms are not new. From shopping centres to stock exchanges, our economies have long played host to companies whose business is intermediation. However, the invention and proliferation of the internet and digital technologies has fundamentally altered their scope and scale, making them into central components of the global economic system. Operations of digital platforms are quickly scalable once in place, allowing them to operate across the world without having a physical presence in any particular country. That makes it possible to create network effects, which occur when the value derived from using a platform depends on the number of other users using it, and which incentivise concentration and consolidation. This has led to a situation in which a small group of platform monopolists – sitting at the heart of the transactions and engagements of the digital, and increasingly, the physical economy – have become the rentier giants of our age.

For the purposes of this report, a 2019 OECD definition of online platforms is instructive. “An online platform,” they explain, “is a digital service that facilitates interactions between two or more distinct but interdependent sets of users (whether firms or individuals) who interact through the service via the internet.”<sup>14</sup>

However, not all online platforms serve the same function or are organised in the same way. Figure 1 provides a rough snapshot of some of the different types of platforms and well-known examples.

**Figure 1**

Platform type	Subcategory	Example
<b>Advertising/Attention</b>	- Search engine	- Google
	- Social network	- Facebook, Instagram - WeChat
<b>Commission</b>	- Transport	- Uber, Lyft
	- Food delivery	- Deliveroo, Just Eat, Instacart
	- Shelter/home rental	- Airbnb
	- Online payment	- Stripe
<b>Consumer subscription</b>	- Cultural goods (music, TV)	- Spotify, Netflix
	- Cloud Computing	- Dropbox
<b>Business and industrial subscription</b>	- Cloud Computing	- Amazon Web Services
	- Software as a Service (SaaS)	- Salesforce
	- Equipment	- Rolls Royce - Siemens - John Deere
<b>Market place (including business to business, business to consumer, and consumer to business)</b>		- Amazon
		- Alibaba

# 3 The political economy of platforms

Over time, many online platforms have evolved from smaller startup operations to large corporations (or subsidiaries of other large corporations) with the help of considerable amounts of venture capital (VC) funding – a form of private equity that is provided to early-stage companies that are seen as having the potential for long-term growth. Uber, for instance, has raised around \$26 billion in funding across 15 financing rounds and in early 2019 went public with a valuation of around \$70 billion.<sup>15</sup> VC funds provide early-stage funding to a large number of companies, hedging on the likelihood that one of those companies matures as a profitable investment that can cover losses. As opposed to Private Equity funding, which invests in late-stage companies that have a viable revenue model, VC investors often support companies before they are revenue-generating and sometimes become closely involved in the direction, management, and monetisation of the startup company. While early stage funding allows for meaningful R&D within the tech sector, it has also driven risky and often exploitative business models, as well as contributes to financialisation.

Stories about successful VC funds are often accompanied by a libertarian undertone, emphasising the benefits that investment and innovation without state involvement and intervention bring to society. Upon closer scrutiny, however, this narrative hardly holds up. As discussed in previous papers in this series, Silicon Valley (and the tech sector more generally) would not exist in anything like its current form without decades of considerable public R&D spending from various levels of the US government, government contracts, and other public support (like tax breaks, subsidies, and incentives).<sup>16</sup>

Leaving this aside, even on their own merits private VC funding of platforms has been fraught with controversy and criticism. For instance, despite being in business for ten years and receiving tens of billions in VC funding, Uber has never turned a profit.<sup>17</sup> In fact, the company warned in its Initial Public Offering (IPO) prospectus that it may never become profitable.<sup>18</sup> Related to the poor performance of companies like Uber, in March of 2020 Softbank's Vision Fund I (a \$100 billion VC fund that shook up the tech world when it was launched in 2017) announced a record-breaking \$18 billion loss.<sup>19</sup>

This raises the obvious question of why VCs would want to invest in platforms. And more specifically why an investor would pour millions into companies that lose money on every unit they sell. VCs are essentially driving a high risk, high reward strategy, investing in the promise of outsized future returns. By buying equity in unproven, high potential companies and pushing for rapid growth, they hope to realise outsized returns with only a few companies in their investment portfolio. They try to capitalise on a startup's first mover advantage, and readily forgo profits to channel all available money into revenue and user growth. Supplying a startup with enough money so they can undercut the prices of their competitors only looks nonsensical until this company has carved out a dominant market share and prices can be raised. From this point onwards, the monopolistic or monopsonistic position can be exploited

with large profit margins.<sup>20</sup> The VC funding strategy is therefore closely connected to platforms' tendency of "market tipping" and becoming a monopolist or monopsonist.

From the perspective of entrepreneurs, lavish VC funding not only helps subsidize exponential growth and undercut their more established competitors, but also enables them to undermine (or outright ignore) potentially burdensome labour and other public policy regulations until a dominant market position is acquired, after which prices can be raised (or labour squeezed further). While this is particularly true for Commission Platforms, it is applicable more broadly also. Both Facebook and Amazon, for instance, concentrated heavily on market dominance over profitability (especially in their early years).

### **Two visions of company growth: platform vs "bricks and mortar"**

It is fashionable these days to ask entrepreneurs the "vision" question. [...] The questions are intuited by the assumption that business leaders are locked into the future by some sort of divine metaphysical connection: the size, color and calculus of their enterprises always measurable "within the margins". The present condition of their business is viewed as a temporary aberration; articulation of a business plan becomes the *raison d'être* of the company. Profit models replace profits, and planning for the present is viewed as an ill-conceived notion. I respectfully disagree.

Leonard Riggion, Chairman and CEO of Barnes and Noble, Letter to our Shareholders, 1997

We believe that a fundamental measure of our success will be the shareholder value we create over the long term. This value will be a direct result of our ability to extend and solidify our current market leadership position. [...] Because of our emphasis on the long term, we may make decisions and weigh tradeoffs differently than some companies. [...] When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows.

Jeff Bezos, Founder and CEO of Amazon, Letter to Shareholders, 1997

Looking at the sheer scale of the platform giants today, as illustrated in Figure 3 (below), it becomes apparent why the growth-before-profits strategy is embraced by investors and entrepreneurs. Besides their almost unparalleled financial performance indicators, the monopoly and monopsony power of platforms becomes apparent through various forms of anti-competitive behaviour. This includes acquiring smaller competitors and stockpiling intellectual property; willfully violating laws and regulations to gain a foothold in new markets; squeezing suppliers and contractors; and using political influence and power to reduce regulations on themselves and/or increase barriers for competitors.

Recently, the Judiciary Committee in the U.S. House of Representatives released the results of an extensive investigation into the practices of Big Tech companies, concluding that these companies are increasingly using their tremendous economic and political power to reduce competition. "To put it simply, companies that once were scrappy, underdog startups that challenged the status quo have become the kinds of monopolies we last saw in the era of oil barons and railroad tycoons," the report states. "By controlling access to markets, these

giants can pick winners and losers throughout our economy. They not only wield tremendous power, but they also abuse it by charging exorbitant fees, imposing oppressive contract terms, and extracting valuable data from the people and businesses that rely on them.”<sup>21</sup>

Besides often being the dominant or even single sellers in a market, online platforms sometimes act as single buyers of labour, i.e. monopsonists.<sup>22</sup> A recent paper by Will Abel, Silvana Tenreyro, and Gregory Thwaites examined the effects of growing monopsony power in the UK private sector from 1998 to 2017.<sup>23</sup> Their conclusion: where workers lack collective bargaining rights or other forms of protection, monopsony drives down pay, and monopsonistic power is concentrated in rentier sectors of the economy. Analysis has also found that the monopsonistic nature of platforms, combined with weak labour standards and information asymmetry, has resulted in task platforms being able to markdown what workers are paid below their rates of productivity.<sup>24</sup>

Platform companies are able to do this in part because existing antitrust frameworks allocate economic coordination rights to large companies while limiting or prohibiting the right of other economic actors to coordinate or co-operate. This embeds a sharp power asymmetry, limiting the ability of other actors, labour in particular, to bargain effectively over the economic surplus as well as terms and conditions. For example, if Uber drivers organised together to raise prices this would likely be treated as an illegal cartel under existing antitrust regulations, whereas within the boundary of the firm, Uber can coordinate prices for users and drivers. In an important argument, Sanjukta Paul makes clear that coordination rights are a public resource, but a right currently almost exclusively allocated to large platform firms within the context of the digital economy.<sup>25</sup> This monopoly of economic coordination rights is another critical element underpinning the power of platforms, and reflects the fact platforms are products of legal and political decisions as much as digital and technological systems.

Crucially, the outsized valuations of platforms are not just a reflection of the value of their products, but also their market power and dominance. There are two central platform characteristics that are crucial drivers of their value and at the same time help to perpetuate the monopolistic or monopsonistic status of some platforms. As previously mentioned, the first one is network effects. Once in place, the value derived from using a platform grows exponentially, and so does its valuation in monetary terms. Network effects present a robust value proposition in the eyes of investors and are one of the reasons why some analysts consider the dominant platforms to essentially be natural monopolies. Moreover, they also serve as a “moat” – a way of entrenching and defending platform businesses.

The second driver of value is the flows of data that platforms facilitate. Data is central to the operation of online platforms, and the digital economy as a whole. At its most basic



level, data refers to the massive amounts of information that companies, governments, and other institutions collect online. Collectively, this information is sometimes referred to as Big Data due to the ever-increasing amount of it, the speed in which it is collected, and the various forms it takes.<sup>26</sup>

Perhaps the most important subset of this information is personal data. Personal data refers to the information collected from and about individuals and groups of individuals. It includes people's search histories, location information, shopping habits, banking details, political preferences, social media posts, health records, facial features, and much more.<sup>27</sup> In different contexts (and combinations), and under different regulatory regimes, certain personal data may or may not be considered Personally Identifiable Information (PII). PII is defined by the US General Services Administration as "information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual."<sup>28</sup>

Data is increasingly becoming an incredibly valuable asset for online platforms and other corporations, and a source of vital comparative advantage in the contemporary economy. For instance, one 2019 study found that "the value of data derived from Amazon's business model can account for 16% of the firm's market valuation, and has an annual growth rate of 35%."<sup>29</sup>

The picture that emerges from this quick survey of the political economy of platforms is one defined by monopolistic and monopsonistic tendencies. Starting with a funding model that works best in winner-takes-all markets, platforms have now acquired a dominant position across a number of them. Bearing great similarity to processes of rentierisation in other domains of the economy, platforms own digital assets that enable network effects and economies of scale and scope. Their main occupation has become the collection of rent while fending off potential competitors.<sup>30</sup> Not coincidentally, they are also being linked to numerous negative social, economic, and political outcomes, as we now explore.

## 4 Detrimental effects of platform monopoly power

The major platforms are enjoying extraordinary economic returns, reflecting their dominant market power. In 2019, for example, the UK's Competition and Markets Authority (CMA) published the results of an investigation (Online platforms and digital advertising market study), which demonstrates the profitability and economic scale of the major platforms. As illustrated in Figure 3, the CMA found that Alphabet's return on capital employed (ROCE) was an average of 39% over the last nine years.<sup>31</sup> The ROCE for 2018 for the Google segment alone was 38%, and would have been 44% if the fine imposed by the European Commission was excluded. Facebook's ROCE has also been consistently high; it has not dropped

below 20% since 2015 and has been on an upward trajectory, reaching 51% in 2018.<sup>32</sup>

### Covid-19 and the tech companies

Looking at the stock market during the Covid-19 crisis, Nathan Tankus has pointed out how indices as baselines conceal more important information about which sectors are surging and which are failing.<sup>33</sup> In September 2020, 57% of S&P 500 companies had negative returns since the beginning of the year, compared to 38% in February before the crisis hit. Moreover, a company's market capitalization – the total current value of its publicly traded shares – correlated with higher year-to-date (YTD) profits. Companies with higher sales growth versus the previous year also correlated with higher YTD profits.

In other words, it appears that the overall performance of stock markets is being driven, in large part, by a small number of big companies. In particular, the S&P 500's strength has been fueled by the five "FAAMG" companies: Facebook, Amazon, Apple, Microsoft, and Google/Alphabet. This is due to their accounting for about 25% of the value of the S&P 500 Index and the Index being market cap weighted. While the S&P 500 is up just over 2% this year, without the FAAMG stocks, the Index would be down 6%.<sup>34</sup> Since the end of 2017, with the S&P 500 up 23%, FAAMG accounts for about 72% of that performance. More broadly, just 15 companies in the Index account for approximately 96% of the gain. The extraordinary performance of the tech giants during the pandemic demonstrates the extent to which these companies are vast engines for the generation of revenue and wealth.

- A snapshot of FAAMG's performances from April to June 2020 indicates a powerful recent track record:
- Facebook's quarterly net income nearly doubled from \$2.6 billion the year prior to \$5.2 billion.<sup>35</sup>
- Amazon saw its net sales increase 40% — to \$88.9 billion from \$63.4 billion a year prior. The company's net income nearly doubled from \$2.6 billion to \$5.2 billion.<sup>36</sup>
- Apple had quarterly revenue of \$59.7 billion — an increase of 11% from the year-ago quarter.<sup>37</sup>
- Microsoft's quarterly revenue increased by 13% from \$33.7 billion to \$38 billion.<sup>38</sup>
- Alphabet's quarterly revenue was slightly down from the previous year due to the volatility across its products, but Google Cloud led Alphabet's products with a 43.2% quarterly revenue increase.<sup>39</sup>

The scale of income some of the major platforms generate is reflected in their extraordinary market valuation. This in turn has vastly increased the wealth of platform shareholders, driving an extraordinary surge in wealth inequality. For example, Mark Zuckerberg saw his fortune increase by 85% to \$101 billion from March to October 2020. This is dwarfed by Amazon CEO and major shareholder, Jeff Bezos, whose net worth rose by 80% to \$203

billion.<sup>41</sup> Nor is this just a recent phenomenon or solely the results of the Covid-19 pandemic. Since 2000, economic rents have been increasing within the economy and have been a central factor in the increasing wage inequality observed during this period.<sup>42</sup>

Algorithmic bias refers to the way in which computer systems and programs (including machine learning and artificial intelligence) can create discriminatory, unfair, and racist outcomes. Recently, for instance, Twitter was forced to apologise for a photo cropping algorithm that was automatically and methodically choosing white faces over Black faces.<sup>43</sup> Algorithmic bias has also shown up in who is targeted for certain political or commercial advertisements, who gets selected for a job interview, and who is chosen to receive a mortgage.<sup>44</sup>

Algorithmic bias is intimately connected to data because in this context, algorithms are simply instructions to a computer program or system on how to analyse the mountains of data that it is being fed.<sup>45</sup> However, “the data on which many of these decision-making systems are trained or checked are often not complete, balanced, or selected appropriately,” Rebecca Heilweil writes.<sup>46</sup> This, along with other factors (such as the conscious and unconscious biases of the humans that create the algorithms) is a key cause of algorithmic bias.

Surveillance capitalism is a term coined by Shoshana Zuboff to describe “the unilateral claiming of private human experience as free raw material for translation into behavioral data.”<sup>47</sup> This data is then packaged and used for a variety of purposes, including as a commodity for sale. The process is non-consensual and secretive by nature, and benefits from a distrust of regulation that was a feature of the neoliberal era as well as the slow erosion of privacy and civil liberties (especially after the 9/11 attacks). Moreover, surveillance capitalism is increasingly moving from data collection to behavioural intervention. “Surveillance capitalists now develop ‘economies of action,’ as they learn to tune, herd, and condition our behavior with subtle and subliminal cues, rewards, and punishments that shunt us toward their most profitable outcomes,” Zuboff explains. This has enormous implications for individual freedoms and the future of democratic societies.<sup>48</sup>

For instance, with regards to Facebook, John Lanchester explains that “even more than it is in the advertising business, Facebook is in the surveillance business. Facebook, in fact, is the biggest surveillance-based enterprise in the history of mankind. It knows far, far more about you than the most intrusive government has ever known about its citizens...What Facebook does is watch you, and then use what it knows about you and your behaviour to sell ads. I’m not sure there has ever been a more complete disconnect between what a company says it does – ‘connect’, ‘build communities’ – and the commercial reality. Note that the company’s knowledge about its users isn’t used merely to target ads but to shape the flow of news to them.”<sup>49</sup>

Financialisation is the process by which the finance sector (banking, investment, stock and currency trading, etc.) grows vis-a-vis the productive sector and gains “greater influence over economic policy and economic outcomes.”<sup>50</sup> It has been linked to numerous detrimental outcomes, including rising inequality, lower economic growth, higher unemployment, less economic stability (and intensifying financial crises), and the capture of regulatory and political processes, among others. While financialisation has been occurring for several decades (especially in the US and UK), it has been turbocharged by the rise of Big Data.<sup>51</sup> For instance, algorithmic trading (sometimes also called speed trading or high-frequency trading) uses computer systems to quickly process large quantities of data and make snap decisions to buy or sell shares. This benefits larger financial firms that can afford the best programs (and programmers) and significantly adds to financial volatility.<sup>52</sup>

Relatedly, the rise of the “fintech” (financial technology) sector is both a contributor to financialisation and is reliant on capturing ever-increasing amounts of data. “The best way to understand fintech,” Brett Scott explains, “is to see it as the automation of traditional finance. Fintech initiatives either create systems that replace the jobs of financial professionals with algorithms – such as a ‘robo-adviser’ – or they create platforms to replace customer-facing service staff with self-service interfaces.”<sup>53</sup> Fintech includes digital currencies, payment platforms, and other financial services that are, Raúl Carillo suggests, “the next data frontier.”<sup>54</sup> One example of how financialisation, platforms, data, surveillance capitalism, and algorithmic bias all comes together is Facebook’s Libra “digital currency” project. Libra, Carillo writes, “poses three overarching, interrelated threats: (1) mass surveillance of Libra users and business partners, (2) hazardous arbitrage of the financial regulatory system, and (3) the concerted encroachment of Facebook and its partners into the financial services sector, which would violate the traditional separation between commerce and banking, and deepen corporate economic and political dominance.”<sup>55</sup>

Above all, the vast revenue generated by the major platforms has turned many into financial actors as much as tech companies. For example, Apple’s third-quarter of 2020 showed it had \$193.817 billion cash on hand, while Alphabet – valued at \$1.04 trillion – has cash reserves of \$120 billion. Though the major digital platforms do invest significantly in R&D, the size of these reserves may impose the opportunity cost of foregone investment in the real economy, with platforms now using cash reserves to invest in financial market speculation and store large cash reserves offshore, limiting tax yield.<sup>56/57</sup> As such, the platforms are increasingly drivers and beneficiaries of financialisation.

Precarious work refers to jobs that are poorly paid, lack social benefits and workplace protections (including access to labour unions), and/or are unstable or insecure.<sup>58</sup> As previously mentioned, such labour arrangements are central to the business model of many platform corporations, particularly those that intermediate labour. In short, these companies use digital technologies to amplify their control and weaken the employment relationship. Indeed, as Katrina Forrester argues, “what is new about the gig economy isn’t that it gives workers flexibility and independence, but that it gives employers something they have otherwise found difficult to attain: workers who are not, technically, their employees but who are nonetheless subject to their discipline and subordinate to their authority.”<sup>59</sup>

Uber and Lyft, for instance, have been in constant legal battles in multiple countries over their model of classifying drivers as independent contractors. Most recently, the companies threatened to withdraw entirely from the State of California if forced to comply with a new law (AB 5, known also as “the gig worker bill”) that would reclassify many independent contractors as employees.<sup>60</sup> At the same time, they spent tens of millions of dollars on a successful referendum (Prop 22) that would exempt them from the law.

Similarly, Amazon (whose CEO Jeff Bezos is on track to become the world’s first trillionaire) has been accused of promoting and profiting from workplace precarity. In particular, the company is known for being aggressively anti-union and workers in its warehouses are both low paid and subjected to gruelling conditions and standards.<sup>61</sup> Moreover, these precarious workplace arrangements are often underpinned by the control and use of data. For instance, in an attempt to skirt labour regulations, ride-hailing platforms (like Uber and Lyft) have sometimes claimed that they use “algorithmic management” techniques rather than traditional management approaches. As the name indicates, these techniques are reliant on data, and in particular “continuous data collection and surveillance via the app.”<sup>62</sup> Similarly, Amazon uses data in both its warehouse control systems and its anti-union activities. For instance, a

recently leaked internal memo from Amazon describes plans to spend hundreds of thousands of dollars on software to monitor union activity and grievances over workplace conditions (among other perceived “threats”). “The new technology system...would help the company analyze and visualize at least around 40 different data sets,” Jason Del Rey and Shirin Ghaffary explain.<sup>63</sup>

Nor is labour insecurity and exploitation geographically bounded. Many of the major platforms rely on outsourced work to operate. For example, as explored in *The Cleaners*, an award-winning 2018 documentary, social-media platforms such as Facebook rely on low-wage, insecure workers in the Global South moderating and “cleaning” uploaded content, removing thousands and thousands of disturbing images and video clips a day. The toll is immense. In May 2020, for example, Facebook “agreed to pay \$52 million to current and former moderators to compensate them for mental health issues developed on the job.”<sup>64</sup> Without this work, the platform business model could not operate as it does.

Social control is a classical concept that can be defined as ways “to regulate, enforce, and encourage conformity to norms both formally and informally...”<sup>65</sup> While companies and governments have always been involved in social control, the rise of Big Data is allowing them to scale up these activities in unprecedented ways. “Our personal spatial, communication, social, cultural, and psychological environments and borders are increasingly subject to technological strategies designed to influence behavior,” Gary Marx writes.<sup>66</sup> These new and emerging technologies include facial recognition, DNA analysis, RFID (Radio-frequency Identification) chips, location tracking, targeted messaging/advertising, biometrics authentication, and many more, all of which rely on the collection and analysis of data.

There are three general concerns around the use of Big Data for social control and the role of platforms. The first centres around how data and platforms enable the expansion of social control approaches and their encroachment into previously untouched parts of individual and community life. The second is around how technologically-enabled social control approaches are used, and, in particular, how they are often deployed in ways that are racist, xenophobic, or otherwise discriminatory and oppressive. And the third is around how technology companies (including platforms) are increasingly partnering with governments and government agencies to enable social control approaches.

One example of how all three of these concerns come together concerns the role Palantir Technologies plays in supporting and enabling US Immigration and Customs Enforcement (ICE) raids, detentions, and deportations.<sup>67</sup> The secretive tech company, which has never turned a profit and recently went public with a valuation of around \$22 billion, is backed by both the Central Intelligence Agency (CIA) and billionaire venture capitalist and prominent Trump supporter Peter Thiel (who also serves on Facebook’s board).<sup>68</sup> In addition to its work with ICE and other US agencies (like the FBI, CIA, and Defense Department), Palantir deploys its data sifting services to governments and businesses in around 150 countries, including the UK, where it recently received a contract related to the Covid-19 pandemic.<sup>69</sup>

Misinformation and manipulation refers to the way in which platforms and Big Data contribute to the undermining of democratic norms and institutions, communitarian values, and science, as well as how they are enabling the rise and proliferation of fascist, racist, and xenophobic ideas and organizing. Social media platforms in particular have been incapable and often unwilling to address these problems. “When citizens in the democratic populace turn to the marketplace of ideas, they increasingly confront misinformation, often strategically deployed by foreign actors seeking to exploit polarization in the political landscape and undermine trust in domestic institutions,” Sarah Kreps writes.<sup>70</sup>

However, the emphasis that is often placed on “foreign actors” in popular and political discourse on this topic is itself misleading. While foreign governments and organisations undoubtedly play a role in spreading misinformation and manipulating data, the biggest threat is domestic. From climate change to Covid-19 to racial justice, the politically and ideologically motivated use of misinformation and manipulation is growing at an alarming rate. For instance, a recent report from the NYU Stern Center for Business and Human Rights found that not only is domestic misinformation a bigger problem than foreign, ideologically “it is predominantly a right-wing phenomenon.”<sup>71</sup>

Platforms and Big Tech companies have been complicit in the rise of misinformation and manipulation, long claiming it was not their job or role to “police” the information and data that was being shared or transmitted over their platforms. However, in recent months and years, several of the larger companies have begun to take tentative steps in the direction of suppressing, flagging, deprioritizing, or removing certain content that is blatantly false or divisive. This, though, raises numerous questions around what crosses the line into misinformation and manipulation, who makes such decisions, and what conflicts of interest and limitations arise when large for-profit corporations are the final arbiter in such matters.

Tax evasion/avoidance and regulatory arbitrage are the processes by which corporations take advantage of different legal and regulatory regimes around the world to boost profits through lower tax rates, lax labour and environmental regulations, and heightened secrecy laws. Tax evasion/avoidance and regulatory arbitrage, while sometimes legal, nonetheless impoverish public finances and contribute to a “race-to-the-bottom” on labour and environmental standards both within countries and between countries.

While platform companies are not the originators of such practices, they are often wholehearted practitioners of them. The transnational nature of many platform businesses, combined with the intangible nature of many of their services and their vast market and political power, makes them particularly well-positioned to take full advantage of such approaches. For instance, in 2019, a report from Fair Tax Mark found that between 2010 and 2019, just six major tech companies (Amazon, Apple, Facebook, Google, Microsoft, and Netflix) had avoided more than \$100 billion in taxes by using tax havens and loopholes around the world.<sup>72</sup>

The environmental impact of platforms and Big Data are, at best, mixed. On the one hand, major platforms may be increasing material efficiency in the economy, through, for example, reducing the need for face-to-face meetings and “dematerialising” the consumption of goods and services. However, there are increasing indications that their business practices and services are also having negative environmental impacts. These include the growing energy requirements of data servers and the lowering of barriers to consumption. An example of the latter is the development of the Amazon Dash Button, which allows the customer to reorder goods at the push of a button, to be delivered by a vehicle. Recently, researchers have estimated that digital communications platforms could create up to 3.5% of global emissions by 2020 – surpassing aviation and shipping – and up to 14% by 2040, around the same proportion as the whole US contributes today. Moreover, they could use as much as 20% of the world’s electricity by 2025.<sup>73</sup>

# 5 Reforms and alternatives

Given the plethora of serious problems and challenges arising around platforms and data, it is unsurprising that there are innumerable reform, restructuring, and reimagining proposals emanating from academia, civil society, and policymakers, among others. In fact, it seems inevitable that some significant changes are on the horizon, and the Big Tech companies themselves are scrambling to get ahead of the curve. For instance, Apple has voluntarily introduced stricter privacy rules for its ecosystems and Facebook has announced an “independent” oversight board that will ultimately set standards on what content should or should not be removed (as well as serve as a venue for user appeals).<sup>74</sup> Facebook CEO Mark Zuckerberg has even demanded more government intervention and regulation in an opinion piece in the Financial Times, which was interpreted as seeking a head start on shaping coming regulations.<sup>75</sup> Big legislative bodies like the US Congress and the EU’s European Commission are currently also conducting investigations, drafting regulation proposals, and preparing legislative and other actions (such as antitrust enforcement). And in the UK, new regulatory bodies are in the making for the digital economy.

## — Antitrust

Prominent among these reform proposals are demands to “break up” platforms and other Big Tech companies. Popularised by US Senator (and former Presidential candidate) Elizabeth Warren, these proposals aim squarely at reducing corporate concentration and reintroducing competition and are reminiscent of the more robust and broadly conceived approach to antitrust that was prevalent in the first half of the 20th century. It is an intuitive and appealing response in view of the large number of acquisitions these corporations have made in recent years, their increasing market and political power, and their monopolistic and rent-seeking activities.

While antitrust strategies are undoubtedly critical with regards to platforms and other Big Tech companies (and, we contend, should be pursued in conjunction with a democratic public ownership agenda), these strategies will likely be limited in what they can achieve and will be complicated to deploy effectively. First and foremost, to be actualised and effective, the entire legal regime around antitrust that has developed over the past several decades would need to be overhauled. Specifically, in the United States there has been a fundamental reinterpretation of antitrust law by the courts and a large decline in successful antitrust prosecutions by the Justice Department. Thus, a successful antitrust strategy is contingent on a wholesale revision of the grounds on which a company is deemed to be a monopoly or anti-competitive. In particular, the still prevalent focus on consumer welfare and prices is likely to be an inadequate standard for antitrust action against platforms where in most cases the “product” is essentially provided for free.

Besides that, even if pro-competition policies – which include not only antitrust, but also more conventional regulatory approaches, such as those recently proposed in the recent report by the UK’s CMA – are implemented, they might not have the intended effects when applied

to natural monopolies.<sup>76</sup> Arguably, many platforms effectively are natural monopolies because their functioning depends on network effects. “The consumer internet is a kind of natural monopoly,” Dipayan Ghosh explains. “Its leading constituent firms consistently exhibit network effects: the networked services operated by Facebook, Amazon, and Google increase in value when more users use them. This meanwhile makes it extraordinarily difficult for new entrants to offer competitive levels of utility to consumers out of the gate. As with telecommunications before it, this industry now maintains impossibly high barriers to entry.”<sup>77</sup>

In other words, even breaking apart Google and Youtube, for instance, might not do much to their dominant market positions in search and video respectively. Moreover, without additional changes to the structure of the companies (i.e. ownership, control, values) and the broader balance between market mechanisms (and imperatives) and state intervention, a reconcentration is almost inevitable. In the US context, there is ample evidence of this. For instance, both Standard Oil and AT&T (two of the most famous antitrust breakups in the 20th Century) ultimately reconsolidated. The former took several decades while the latter occurred relatively quickly, highlighting the additional challenges related to implementing antitrust strategies in an era of strong ideological and political adherence to market fundamentalism and neoliberalism.

### — **Data Protection & Privacy**

In addition to antitrust regulation and competition policy, data protection and privacy has been a major concern for regulators. Common proposals include limiting the use of data (e.g. for how long it can be kept by platform), requiring opt-outs from or opt-ins into certain uses of data, and increasing transparency about the use of consumer data. The EU's General Data Protection Regulation (GDPR) is an example of how regulators try to achieve this. The principles of the GDPR broadly state that businesses are required to only collect the minimum amount of data necessary to provide their services. Somewhat expectedly, business representatives criticised the GDPR requirements, contending that they slow business activity and decrease the quality of digital services (e.g. relevance of ads, search results).

From a different perspective, it has been noted that the GDPR might actually fortify the power of large corporations while it hurts smaller businesses. This is because smaller businesses have to devote a relatively larger share of their resources to compliance measures. From a civil rights perspective, the GDPR will only have a lasting impact if breaches are consequently investigated and penalised. However, in June 2020 the EU admitted that there has not been equal enforcement across member states and that cross-border disputes have not been resolved.<sup>78</sup> Other regulations that are similar to the GDPR, like the State of California's California Consumer Privacy Act (CCPA), are bedeviled by similar problems. For instance, while the CCPA certainly is an improvement in a legal landscape that previously provided next to no data privacy protections, enforcement has been difficult and could potentially be done more effectively on the federal level.

Antitrust regulation and privacy protection also influence each other. The specter of antitrust regulation has prompted various Big Tech companies into conciliatory gestures towards regulators around privacy. In 2018, for instance, Apple's Tim Cook gave a data privacy speech in which he warned against an emerging “data-industrial complex”. The most decisive step to follow from this so far was Apple's announcement to block tracking cookies in iOS14 – which is to the direct detriment of platforms relying on ad revenue like Google and Facebook.

### — **Public utilities**

If platforms are natural monopolies, one alternative, Ghosh and others suggest, would be to regulate them like public utilities. Public utilities are enterprises or business organizations that provide a public service and are subject to specific government regulations. Traditionally these have included entities that provide electricity, water, and communication services, among others. Depending on the prevailing legal regime in a particular area, this definition can include privately owned utilities (those owned by individuals and investors) and/or publicly owned utilities (those owned by the people, usually through government bodies).

Treating platforms as public utilities would likely include clear and transparent processes for evaluating mergers, acquisitions, and entry into new business lines; stricter standards around data and privacy; transparency around algorithms and algorithmic bias; a taxation regime linked to public interest objectives (such as local journalism); and requirements around investment and innovation.<sup>79</sup>

The idea of classifying and regulating platforms and other Big Data dependent corporations as public utilities is a controversial, yet emerging perspective (one that is vehemently opposed by the companies themselves along with more market-oriented scholars and institutions). Explaining the argument for reclassification, Vincente Bagnoli writes that “the platforms’ ecosystem deals with services, products, ideas and democracy, the access to which has become essential for communities, consumers and sellers. The range extends to books, hotels and news, among others, which are not often available elsewhere. Therefore, the ecosystem of digital platforms should be measured similarly to public utilities, since it is an infrastructure of a public-good nature which users rely on.”<sup>80</sup>

#### Alternative models of ownership

The intersecting concepts of natural monopoly and public utility regulation open up the fundamental question of ownership. Specifically, is the “regulated utility” or “investor owned utility” model – essentially more stringently regulated for-profit monopolies – of public utilities sufficient to deal with the innumerable problems associated with corporate concentration and power? Traditionally, the answer from both experience and theory (including from diverse ideological perspectives) has often been no, and that it is preferable to adopt alternative models of ownership in such cases.

In terms of the former, the US experience with investor-owned utilities in the energy sector demonstrates that, while better than nothing, stringent regulation does little to curb excessive costs for consumers, corporate power (and influence over the democratic system), environmental degradation, labour abuses, and other poor outcomes.<sup>81</sup> With regards to the latter, even classic free-marketeers like H.C. Simons and Milton Friedman warned against the dangers of monopolistic private corporations and suggested that alternative forms of ownership may be preferable. For instance, in his famous book *Capitalism and Freedom*, Friedman wrote that “if the technical monopoly is of a service or commodity that is regarded as essential and if its monopoly power is sizeable, even the short-run effects of private unregulated monopoly may not be tolerable, and either public regulation or ownership may be a lesser evil” (emphasis added).<sup>82</sup>

Thus far, much of the discourse around alternative forms of ownership as they relate to platforms and data has centred on cooperative forms. Specifically shifting the ownership of platforms (and, implicitly, the data collection process) into the hands of their users who will govern them according to democratic principles (such as one person, one vote). This approach is grounded in the long (and often successful) history of cooperatives as an alternative and counterbalance to corporate power, wealth extraction, and exploitative labour arrangements.

In essence, proponents of platform cooperatives contend that people who are currently at the receiving end of platform power relations (like contractors without employment benefits and users without control over their data) could and should have a meaningful say in their interactions with these platforms through a change in platforms' ownership structure; and that this would offer the potential to correct for many of the deficiencies exhibited by platforms under corporate control.<sup>83</sup> For instance, the New Economics Foundation recently conducted a study exploring the potential of platform cooperatives in car services. It found that cooperative platform models could increase safety, improve access to personalised services, and transfer greater power to drivers.<sup>84</sup>

While experiments with platform cooperatives are emerging in virtually every sector and in countries around the world, they have not, as of yet, reached a scale by which they could be considered a viable alternative to the corporate platform model. Part of the reason for this is that the existing market power and loss-making business model of the large platforms makes it difficult to compete and/or scale up alternative modes.<sup>85</sup> Specifically, lack of financing is a key problem.<sup>86</sup> As previously mentioned, platforms have been relying on large amounts of VC funding which is needed to sustain the "growth before profits" strategy which is designed to drive competitors out of business. However, this is not a replicable model for platform cooperatives for several reasons. Organic growth and dispersed ownership are often incompatible with the performance goals set out by venture capitalists. Consequently, it is unlikely that investors will realise outsized returns with platform cooperatives.<sup>87</sup> Besides that, cooperatives often rightly display reservations regarding the mass collection and monetization of data and the use of technologies that have become associated with surveillance capitalism.

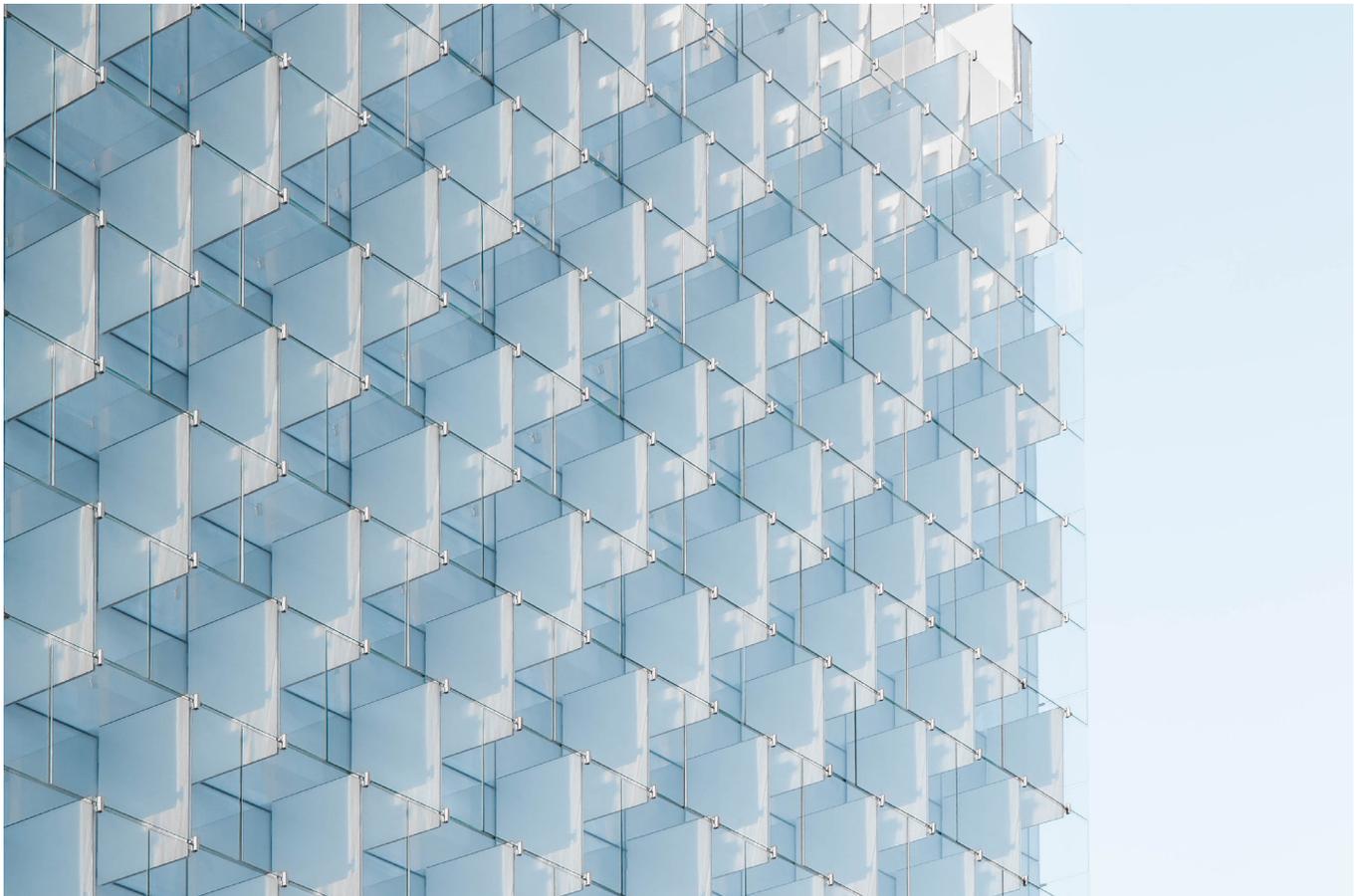
However, part of the problem is also structural. Traditionally, cooperatives are still market and profit-oriented, especially within capitalist systems. As Dario Azzellini puts it: Cooperatives "tend to operate within the capitalist logic of productivity and profitability...cooperatives rarely question private ownership of the means of production. They tend to see this individualistic notion as the source of the right to participate in decision-making and benefits. This idea, and its logic, is also fundamental to capitalism. Hence, cooperatives may represent a positive step in democratizing the ownership of enterprises within the frame of a capitalist economy, but they are not automatically an alternative institutional form."<sup>88</sup> Thus, without additional public support and control structures, cooperatives face limitations to scale, impact, and influence in a capitalist economic system. Moreover, they often have to compromise on their cooperative ethos to remain competitive or face pressures to sell out to their larger and better-financed rivals.

As will be discussed below, democratic public ownership (either directly through commons approaches or indirectly through representative structures) may be able to play this supportive role that helps to scale up platform cooperatives and collective approaches to data ownership and control. For instance, just as how publicly-owned banks and agricultural processing facilities have supported the development of an ecosystem of cooperatives and small farmers in North Dakota and elsewhere, in the digital economy, democratic public ownership of platforms and digital infrastructure could help to facilitate the proliferation and growth of cooperatives and displace the corporate "Big Tech" platforms that are currently dominant. These partnerships and hybrid ownership forms could mitigate some of the limitations and pressures platform cooperatives face on their own (such as creating a sheltered market and protecting them from corporate takeover), and maximize the benefits of both models in terms of ownership rights and democratic governance. Moreover, as will be discussed, democratic public ownership and robust antitrust strategies are also not necessarily mutually

exclusive, with the latter offering a potential transitional process and the former a potential new institutional design.

Finally, in recent years there have been a few emerging proposals around alternative models of ownership that go beyond the platform cooperative model. For instance, the concept of a Digital Common Wealth combines the focus on ownership with a keen awareness of the importance of data. It builds on some of the regulatory proposals previously discussed in order to envision a more radical alternative to the current platform economy. Starting with data, the central commodity of the platform economy, Mathew Lawrence (who is also a co-author of this report) and Laurie Laybourn-Langton argue that its production and distribution should serve the common good.<sup>89</sup> The suggested means to achieve this includes pro-competition strategies such as forcing major platforms to open up their data upon entry to new markets and introducing local strategies for new platform development. However, the Digital Commonwealth proposal also envisions direct state involvement and public ownership. Beyond regulating platform giants as utilities, this would mean creating a publicly owned service that drives the curation and productive use of public data.

Building on this with the concept of a Digital Commons, James Meadway makes recommendations for local and national government that focus on public/common ownership of things like digital infrastructure (which should be under local and democratic control) and intellectual property (e.g. the IP regime should be loosened around AI research).<sup>90</sup> Further recommendations include data procurement and open data policies on the local level, the creation of data trusts, and a coherent approach to “data sovereignty” on the national level.



# 6 Data and platforms in the UK

As Brett Christophers has recently pointed out, rentierism is currently a dominant dynamic in the UK economy.<sup>91</sup> This insight is pertinent for understanding data and platforms and the UK tech sector more generally. As mentioned above, platforms display a tendency towards monopolisation and this section contextualises this development by looking at the UK political, regulatory and legal environment. In all three domains, the UK has been very accommodating, which resulted in fast growth of the tech sector in recent years.<sup>92</sup>

There are currently 77 tech “unicorns” in the UK (privately held startup companies with a valuation of over \$1 billion), ranking third in the world behind only the US and China. Among them are popular platforms like the food-delivery company Deliveroo, the fintech firms Revolut and Transferwise, and the messaging service Telegram. Platforms more generally seem to have benefitted from the UK regulatory environment, given that they play an outsized economic role compared to other countries. For instance, a study by Brian Fabo and colleagues examining the European platform economy found that the UK (together with France) operated most platforms and was among the countries with the highest share of active platforms.<sup>93</sup> Another study by Annarosa Pesole and colleagues found that “the UK has the highest incidence of platform work” among EU countries.<sup>94</sup>

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A tech ecosystem of this size can only be brought into existence with large sums of investment. The expansion of the tech sector went hand in hand with the growth of VC investing in the UK. In 2019, venture capital and private equity invested £10.2 billion into 1,198 companies. The pool from which the funding is drawn (i.e. the sum of VC and PE funds raised) reached a total of £47.59 billion in 2019. Further, VC investment more than doubled to £958 million between 2017 and 2019.<sup>95</sup> While London remains by far the most active area in terms of companies founded and investment received, other areas are catching up. University cities like Cambridge and Oxford benefit from graduates that go on to become founders, or cutting-edge research that is patented and spun out as a company. Bristol and especially Manchester are also fast-growing tech clusters.

Venture capital financing alone cannot create rentier platforms, however. It needs to be met with a welcoming regulatory environment, which the UK has been happy to provide. An example of this is the East London Tech City (more commonly known as “Silicon Roundabout”) initiative. Supported by the Conservative-led UK government from 2010 onwards, the initiative sought to create a tech ecosystem akin to Silicon Valley. While shortly boosting the tech scene, it will most likely be remembered for the real estate glut it created.<sup>96</sup>

The regulatory approach to platforms and tech companies by past UK governments is best described as being steered by the hope for self-regulation among firms. In retrospect, it is of course easy to point out that self-regulation has failed. But as late as 2017, the UK Digital Strategy advocated for hands-off, “innovation-friendly” regulation.<sup>97</sup> Given that this was after the Brexit referendum and the 2016 US election, two events which made the negative potentials of tech companies abundantly clear to the broader public (especially around misinformation and manipulation), it is telling that this is hardly addressed. All the 2017 UK Digital Strategy mentions

with regards to these momentous events is that some companies with headquarters outside the UK are currently under public scrutiny and that a coordinated international response is needed.

By 2019, the problems platforms create could no longer go unaddressed. At this point, it had also become clear that the European Commission, as one of the most active tech regulators worldwide, would not be relevant anymore for UK legislation.<sup>98</sup> In response, the House of Lords report *Regulating in a Digital World* found that “regulation of the digital environment is fragmented with overlaps and gaps. Notably, there is no specific content regulator for the internet.”<sup>99</sup> Further, it recommended the development of a comprehensive and holistic strategy for regulation. Following this, the Furman Review recommended a new watchdog (Digital Markets Unit), an updated merger policy, and changes to antitrust policy.<sup>100</sup> For now, the last event in this chain of incremental policy changes was the UK Government’s announcement that it would accept all of the Furman Review’s strategic recommendations. It further asked the CMA to lead a Digital Markets Taskforce.

The question is whether this will result in meaningful change for platform regulation. On the one hand, the CMA’s recent market study of platforms and digital advertising squarely addressed the market-dominance of Google and Facebook.<sup>101</sup> Furthermore, the Digital Regulation Cooperation Forum, formed of CMA, ICO and Ofcom, now clearly names designated regulators for the digital economy and the UK Parliament has announced an investigation into music streaming services, focusing on the business models operated by platforms such as Spotify, Apple Music, Amazon Music and Google Play.<sup>102</sup>

On the other hand, when faced with hard decisions, the CMA has so far refrained from drastic actions. The CMA’s approval of Amazon’s investment in Deliveroo is a case in point. In early 2019, Amazon led a £450 million investment round and acquired a 16% stake in Deliveroo. The CMA initially probed the deal and then threatened an in-depth investigation. When Deliveroo faced bankruptcy during the early stages of the pandemic, the deal was first provisionally approved and then formally cleared a few months later.<sup>103</sup>

Alongside this, UK employment law has helped create a structurally precarious digital labour market. By classifying platform workers by the employment status of “worker” rather than “employee”, it means many people working in the platform economy do not have many benefits that employees have by right. Addressing this structural feature of the platform economy will require rethinking UK employment law and its wider social security system.

## 7 Data and platforms in the US

The United States is the nominal home of many of the largest and most powerful platform companies in the world, including Uber, Lyft, Facebook, Amazon, Twitter, WhatsApp (owned by Facebook), Instagram (owned by Facebook), PayPal, eBay, and many others. As such, many reform proposals and alternatives will be guided by, and have to navigate, the complex web of US legal and regulatory frameworks. These vary from sector to sector and by

geography, and it would be impossible to document the details of every single relevant local, state, and federal law and regulation here. Rather, what follows is a high level overview of the policy landscape as it currently exists with regards to platforms and data, with a specific focus on a few particularly relevant areas.

### — **Antitrust**

The three main US antitrust laws are the Sherman Antitrust Act of 1890, the Clayton Act, and the Federal Trade Commission Acts of 1914.<sup>104</sup> The latter created the Federal Trade Commission (FTC) as the regulatory body that works in conjunction with the Department of Justice (DOJ) to enforce antitrust. This arrangement has left broad authority to interpret the original intent of the antitrust statutes with the FTC, DOJ, and judicial system.

Original conceptions and enforcement of the antitrust statutes were “not confined to prices, efficiency, or consumer welfare, the focus of modern antitrust regulation,” K. Sabeel Rahman writes. “Rather, reformers accounted for broader consequences of concentrated economic power, developing a robust set of ideas and arguments about how to regulate private actors providing needed goods and services.”<sup>105</sup> However, this broader focus has faded and since the mid part of the 20th century there has been a fundamental reinterpretation of antitrust law by the courts and a large decline in successful antitrust prosecutions by the Justice Department. “By the 1970s and 1980s,” Harvard political philosopher Michael Sandel writes in *Democracy’s Discontent*, “the ‘antitrust dream’ of a decentralized economy sustaining self-governing communities had given way to the more mundane mission of maximizing consumer welfare.”<sup>106</sup>

The recent investigation by the House Antitrust Subcommittee into Google, Amazon, Facebook, and Apple (GAFA) reveals the impact this consumer welfare centric concept of antitrust has with regard to tech platforms. Despite clear evidence of monopolization in key areas of the digital economy, antitrust enforcers did not block a single acquisition out of hundreds done by these companies over the last decade. Further, despite GAFA having created innovation “kill zones” where venture capitalists “prefer realizing their investments through acquisitions rather than through public markets,” no meaningful antitrust enforcement has thus far been attempted.<sup>107</sup> Most alarmingly, the investigation identifies these platforms as direct threats to democracy because they are able to exist above the law – i.e. they consider the unprecedented fines levied in both in the US and elsewhere a “cost of business” – yet still there is no real evidence that either the Democratic or Republican Party has the political will to use the antitrust powers of the government to address these issues.

While the House report is a damning indictment of the platforms’ monopolistic and monopsonistic practices and suggests important policies for increasing competition, the recommendations are limited since a market-based competition framework doesn’t necessarily or sufficiently solve the natural monopoly problems of network effects, switching costs, data feedback loops, and economies of scale that the report clearly defines. Further, the report lacks imagination around the ownership structures and social values that ought to be embedded in the digital economy.

### — **Workers’ rights**

Thus far, the federal government has not intervened in any meaningful way to restrict how platform companies like Uber, Lyft, and DoorDash misclassify their workers as independent contractors to avoid various labour protections, workplace standards, and tax obligations. In fact, the only meaningful recent federal level intervention has been a proposed rule by the

Department of Labor (led by Eugene Scalia, a Trump appointee and son of the conservative Supreme Court judge Antonin Scalia) that would actually make it harder to challenge such misclassification and would raise the bar on who can be considered an employee rather than an independent contractor.<sup>108</sup>

In the face of an uninterested, if not downright hostile, federal government, US policy debates around gig workers' employment rights and protections have shifted to the states – with California, home to many of the large platform companies, at the epicentre. In September 2019, AB5 was signed into law, establishing the presumption that workers are employees and requiring employers to pass the “ABC test” to prove workers should be classified as independent contractors. In reaction, platform companies (led by Uber and Lyft) established two prongs of resistance. On the one hand, they refused to comply with the new law when it came into effect in January 2020 and instead challenged it in the courts. On the other, they filed and backed a ballot initiative, Proposition 22, to exempt app-based drivers from AB5 and to continue to classify them as independent contractors, which passed in the 2020 general election.<sup>109</sup>

Beyond the potential impact on workers, these events represent a significant escalation in platforms' threat to democracy and portend a future in which their overwhelming economic power increasingly translates to control over the political system. Prop 22 requires a seven-eighths majority in the state legislature to overturn it – effectively codifying it into law indefinitely. Moreover, through October 2020, the Yes on 22 campaign raised more than \$184 million, most of it from platform companies, making the ballot initiative the most expensive in US history.<sup>110</sup> This level of corporate spending simply cannot be matched by opponents (in this case, labour rights proponents only managed to raise around \$10 million).

There is also ample further evidence that the platform companies have taken the gloves off when it comes to their political activities in California. For instance, NAACP President Alice Huffman became an outspoken supporter of Yes on 22 after having received \$85,000 from the Yes on 22 campaign.<sup>111</sup> In addition, Lyft recently contributed \$100,000 to a political action committee to oust an Oakland City Councilmember who supported a local 50c tax on a ride-share – a strikingly large “investment” for a city-level race.<sup>112</sup> And, as previously mentioned, in August 2020, following a court's ruling that Uber and Lyft were in violation of AB5, both companies threatened a capital strike.<sup>113</sup> The threat forced a compromise with the state whereby the companies only had to show how they would shift their business model following the vote on Prop 22 – meaning the capital strike worked and actively allowed them to subvert the law until they were able to finally kill it through the referendum process. Perhaps most disturbingly, Uber, Lyft, and Postmates even utilized their platform interfaces to directly share Yes on 22 propaganda with users and workers – a big development with regards to levels of surveillance capitalism and social control.<sup>114</sup>

“To recap,” Edward Ongweso Jr. summarized after California voters approved Prop 22 on November 3, 2020, “corporations with some of the most exploitative labor practices in existence wrote a law to crush labor, spent hundreds of millions of dollars to create propaganda to convince (or, failing that, mislead) voters, won, and saw massive returns on their spending as stock prices rose. This sort of flagrantly anti-democratic behavior is normal for corporations in America, where they are empowered to write their own laws and buy support for them among the public.”<sup>115</sup>

## — Speech

Since the First Amendment's guarantee of freedom of speech is relevant only to preventing government interference in citizen expression, social media platforms have thus far had relatively complete and unaccountable control over the new public square. Platforms have been able to decide for themselves (or not decide in many cases) what speech is considered valuable (i.e., that which generates "user engagement"), what constitutes legitimate political communications versus "interference", and what is considered hate speech or threats of violence.

Section 230 of the Communications Decency Act – considered "the most important law protecting internet speech" – provides platforms in the US legal liability from being treated as a publisher for illegal content by users. In many ways, this law as currently interpreted serves as a double edged sword.<sup>116</sup> On the one hand, it preserves the ideal of a free and open internet, since the platforms are not obligated to censor speech; on the other hand, though, the power to remove or not remove certain types of content is left solely in the hands of private, for-profit platforms with little to no public input and accountability.

Section 230 has recently come under fire from both Democrats and Republicans, the former with regards to the platforms' role in knowingly propagating "disinformation"; and the latter with regards to perceived bias by platforms against right-wing content.<sup>117</sup> In September 2020, Attorney General Barr's DOJ proposed a series of legislative changes to Section 230. This included exempting Section 230 liability for "terrorist" content and any content moderation not done in "good faith... in accordance with plain and particular terms of service and accompanied by a reasonable explanation."<sup>118</sup> This is particularly chilling considering that the Trump Administration has aggressively moved to paint antifascist protesters and Black Lives Matter supporters as "terrorists" in the wake of the uprisings against police brutality and white supremacy this past summer.

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Beyond Section 230, another relevant matter concerns the The Knight First Amendment Institute at Columbia University's lawsuit against President Trump for blocking users on Twitter on the basis that it amounted to a violation of the First Amendment (since the account is used for government purposes and the blocks are on the basis of viewpoint discrimination).<sup>119</sup> The initial ruling came down in favour of the plaintiffs and the Trump administration recently appealed the decision to the Supreme Court with the outcome and surrounding debate likely having broad implications for the public utility function of social media platforms with regards to speech.<sup>120</sup>

## — Data

While the Fourth Amendment of the US Constitution guarantees the right against unreasonable search and seizures, this principle has not, as of yet, been extended to the digital sphere. Moreover, unlike the European Union's recent General Data Protection Regulation (GDPR), the US has no comprehensive national standard for data privacy and instead relies on a patchwork of federal legislation to regulate data collection and analysis practices (including the Federal Trade Commission Act, the Children's Online Privacy Protection Act, the Health Insurance Portability and Accounting Act, and the Gramm Leach Bliley Act).<sup>121</sup> This lack of a national standard is partially responsible for the platforms' ability to monopolize various spheres of the digital economy. In order to address this, Senator Sherrod Brown recently introduced the Data Accountability and Transparency Act, which has been called the "gold standard" of data privacy legislation by legal scholar Frank Pasquale.<sup>122</sup>

In the absence of federal level standards, state governments are leading the way on data privacy and data security matters, with the leading edge of digital privacy law being the California Consumer Privacy Act (CCPA).<sup>123</sup> Similar to the GDPR, it provides users "the right to

know about the personal information a business collects about them and how it is used and shared; the right to delete personal information collected from them (with some exceptions); the right to opt-out of the sale of their personal information; and the right to non-discrimination for exercising their CCPA rights.”<sup>124</sup> However, these rights do not meaningfully challenge the dominant power of the platforms since most users will default to accepting their terms and conditions rather than affirmatively exercising their rights.

Beyond this, Governor Gavin Newsom has floated a “data dividend” proposal by which corporations that collect and monetize online data would be required to make payments back to consumers or the state government. In announcing the proposal, Newsom stated that “California’s consumers should also be able to share in the wealth that is created from their data.”<sup>125</sup> While elements of this proposed approach are interesting (including the possibility of using the funds to develop social wealth funds that pay a citizen dividend or support social services), the devil is in the detail. Without being connected to new mechanisms to both reduce the amount of data being collected and extend democratic control over data once it is collected, such an approach runs the risk of actually further entrenching surveillance capitalism. “It is not a good deal for consumers to get a handful of dollars from companies in exchange for surveillance capitalism remaining unchecked,” the Electronic Frontier Foundation contends.<sup>126</sup>

When it comes to data collection by public entities at the federal level, in 2011 the Office of Management and Budget (OMB) established standards for procured cloud services and management, known as the Federal Risk and Authorization Management Program (FedRAMP).<sup>127</sup> In 2016, in order to create cohesive federal policy on government data standards, Congress established the Commission on Evidence-based Policymaking.<sup>128</sup> The Commission made recommendations on establishing a National Secure Data Service to store the trove of government data and facilitate linkages for authorized projects, modernizing privacy protections, and strengthening institutional capacity for data storage and service.<sup>129</sup> The bipartisan legislative outcome – the Foundations for Evidence-based Policymaking Act – went into effect in January 2019, establishing an Advisory Committee on Data for Evidence Building at OMB and enacting about half the Commission’s recommendations. Following the Evidence Act’s adoption, the Trump Administration advanced the Federal Data Strategy to begin implementing the new rules and building institutional capacity.<sup>130</sup>

## — Financial technology (fintech)



Due to a lack of new policymaking by Congress, the rapidly emerging and growing fintech sector is largely regulated under interpretations of existing finance and banking legislation. This has been proven insufficient by the Facebook-led Libra project, which proposes “to enable a simple global payment system and financial infrastructure that empowers billions of people” via Libra as a “stablecoin” cryptocurrency and Calibra as a digital wallets system.<sup>131</sup> According to Raúl Carrillo, Policy Counsel for Demand Progress, Libra “poses three overarching, interrelated threats: (1) mass surveillance of Libra users and business partners, (2) hazardous arbitrage of the financial regulatory system, and (3) the concerted encroachment of Facebook and its partners into the financial services sector, which would violate the traditional separation between commerce and banking, and deepen corporate economic and political dominance.”<sup>132</sup> Libra’s announcement in June 2019 sparked significant backlash from policymakers and central banks worldwide, with calls for a moratorium on its launch until a proper regulatory framework was put in place.<sup>133</sup>

In 2019, House Financial Services Committee Chairperson Maxine Waters established the Task Force on Financial Technology in order to adapt policy to the emerging fintech ecosystem.<sup>134</sup> While the task force is still conducting its work and has yet to offer any final recommendations, during a recent hearing Carrillo laid out a number of concerns around the current legal regime surrounding fintech, including: the use of AI and predictive analytics for marketing, loan underwriting and monitoring, and pricing; partnerships between banks and surveillance-based tech companies; the irresponsible integration of banking and commerce; the entrenchment of corporate power and threat to financial stability; and the integration of financial data collection with US law enforcement. In particular, Carrillo stated that:

- “The existing regulatory framework allows nonbank [fintech] companies to ‘rent’ a bank charter in order to evade state consumer protection laws.
- The use of artificial intelligence (AI) and predictive analytics for marketing, loan underwriting and monitoring, and the pricing of various products and services raises fundamental consumer protection risks and fair lending concerns.
- Existing partnerships between banks and surveillance-based technology companies have already raised unique, specific concerns regarding discrimination.
- Rather than providing consistent guidance and oversight through proper process, many regulators have adopted a laissez faire attitude toward fintech.
- Wall Street and Silicon Valley are irresponsibly integrating banking and commerce (and payments and platforms).
- Global stablecoin projects proposed by Big Tech [e.g., Facebook’s Libra project] would entrench corporate power and threaten financial stability.
- Wall Street, Silicon Valley, and the fintech industry are waging a “war on cash”, leading to heightened surveillance, increased corporate power, and financial exclusion.
- Financial data collection is becoming increasingly intertwined with federal, state, and local law enforcement and threatening our civil rights.”<sup>135</sup>

# 8 Goals and principles of democratic public ownership

Despite the multifaceted set of problems and poor outcomes associated with platforms and data in our contemporary political economic system, it is not difficult to see their emancipatory and democratic potential if structured in different ways and oriented around a more progressive and solidaristic set of goals and values. This is because, at their heart, platforms are simply ways in which to bring disparate people and groups together (which is important given that many of the challenges we face are increasingly global in nature); and data is just information that can be collected or not collected and used or not used for any purpose society sees fit.

However, like always, one of the key questions is around ownership and control. For-profit corporate ownership and control of platforms and data within a pseudo-democratic (at best), inequitable, extractive, capitalist, and imperialist political economic system is unlikely to ever deliver positive outcomes. Ultimately, what is needed are new models of public ownership and control of platforms and data, along with a vision of how these interact with, and are embedded in, different political economic arrangements and structures; as well as clear transition pathways and intermediary steps. To guide these discussions, decisions, and debates we suggest the following five principles and goals.

## 1. Privacy and anti-surveillance

As previously discussed, many platforms have essentially become large-scale surveillance operations. And more generally, data is increasingly being used and misused by private and public actors (often in conjunction with each other) for purposes of social control and in ways that entrench racial and economic inequality, power disparities, and oppression and subjugation. Of particular concern is how data collected for seemingly innocuous and beneficial purposes can subsequently be used for purposes other than was originally intended.

As such, privacy and anti-surveillance must be key principles in any vision of democratic public ownership of data and platforms (or reform and restructuring proposals in general). This starts with a simple question: “should this data exist?” This question must take into account how data, particularly personally identifiable data, inevitably generates oppressive capacity for discipline once the data can be leveraged by someone beyond the data subject. Thus, even though it could be argued that some forms of data may have positive applications, the potential harm of misuse may require it not to be brought into existence at all.

Moreover, how such decisions are made cannot be left solely in the hands of private corporations or the state as presently constituted, and new democratic and multi-stakeholder organizations and approaches will likely be needed. Beyond this, access

to data that is collected should be mediated by democratically accountable ownership structures and subject to strict regulations around use (including transparency around data usage and algorithms) and privacy. If done correctly, and in accordance with an anti-surveillance framework, democratic public ownership of platforms and data could represent a critical tool for combatting the enormous, secretive, and fundamentally anti-democratic collection of data by governments and private corporations alike.

## 2. From enclosure to the commons

Currently, most of the major platforms operate using an enclosure model, jealously guarding and protecting their algorithms, vast treasure troves of data, and business practices with a thicket of IP protections and vast armies of lawyers and lobbyists. However, it is becoming increasingly clear that platforms provide products and services that have become essential for billions of people in the modern world. Moreover, these products and services are often valuable and impactful because platforms generate network effects. Ultimately, this means that platforms and data should likely be reconceptualized as public utilities and assets.

Doing so opens up various new forms of regulation and ownership, and during these discussions and debates, we ought to focus on the structure and mechanics of platforms with an eye towards moving away from a model of enclosure towards a public or commons-based model. This means focusing on more than just bolstering competition among private, for-profit entities, and instead thinking about what values and organisational structures can maximize public benefit and the common good.

Similarly, when data is collected it should be held in a public data commons or data trust in order to both protect privacy and challenge the economic foundation of platforms' monopolistic and monopsonistic power. As previously mentioned, these public data entities must be structured democratically and with appropriate measures and safeguards put in place to regulate access and use and restrict surveillance and misuse.

## 3. Global multi-stakeholder governance

While many of the major platform and Big Tech companies are nominally based in the United States (and to a lesser extent, the UK), their users are located throughout the world. For instance, there are more than twice as many Facebook users in Asia than there are in North America, and Uber operates in upwards of 60 countries and 700 cities around the world.<sup>136</sup> Consequently, a situation has arisen by which predominantly Western corporations are collecting and extracting data from the Global South to bolster their profits. This “digital colonialism,” Danielle Coleman writes, amounts to a “modern-day ‘Scramble for Africa’ where large scale tech companies extract, analyze, and own user data for profit and market influence with nominal benefit to the data source.”<sup>137</sup>

Any proposals to democratize the ownership of platforms and data must take these global dynamics into account and, in accordance with the principle of “affected interest,” set up processes and approaches by which people around the world (and not just in the US and the UK) can participate in the ownership and governance of plat-

forms and data commons/trusts. While there are multiple ways in which this could be achieved, and these likely will vary depending on the type of platform involved, Elinor Ostrom's work on commons management approaches (and in particular "nested" structures of governance and decision-making) is particularly instructive.<sup>138</sup>

#### **4. Reducing corporate concentration and power**

As previously discussed, a small number of platforms and Big Tech companies have established (or are establishing) monopoly and monopsony power across various sectors of the digital economy. This is increasingly alarming experts and politicians on both sides of the Atlantic, leading to renewed calls for more robust antitrust enforcement. In addition to the aforementioned US House of Representatives report, the US Justice Department recently announced that it is filing an antitrust lawsuit against Google.<sup>139</sup> This is in addition to numerous state-level investigations into that company.<sup>140</sup>

Antitrust is a powerful tool, but one which is hard to wield in the current political economic context. Its objectives are also usually limited to focusing on encouraging greater competition (at the expense of other goals and objectives) and its market effects can be somewhat temporary (i.e. corporate reconsolidation). Inasmuch as antitrust strategies can be connected to deeper structural changes in the ownership and control of platforms and Big Tech companies (for instance, broken up companies or spun off business lines are subsequently converted to cooperative or public forms of ownership or control), they should be supported and pursued.

However, absent these additional provisions and perspectives, other approaches to curbing corporate concentration and power may be more applicable and immediately actionable (such as public utility regulation or nationalization).

#### **5. Increasing public funding**

One of the factors driving corporate concentration and power in the technology sector, and one of the factors holding back the development, proliferation, and scaling of more democratic alternatives, is funding. At present, platforms (especially the larger ones) are swimming in VC funding that allows them (and compels them) to undercut competitors, seize market share, engage in regulatory arbitrage, undermine labour and other standards, and buy up competitors and smaller firms. At the same time, they are using their immense economic and political power to secure lucrative government R&D investment and contracts.

In addition to other government actions to reduce corporate power and increase competition (such as antitrust and regulatory strategies), public funding (in the form of direct and indirect subsidies and state privileges) should be both increased and diverted away from large platforms and tech companies (who don't need it given their VC and other sources of private funds), and into cooperatives, publicly owned platforms, and other alternatives. In addition to binding indirect state support such as IP and public R&D to democratic principles, this call for public funding includes direct federal spending for the development of a democratic digital economy. For

instance, public funding could be made available for developing an application programming interface (API) that would lower platform development and startup costs, encouraging the local development of platforms. Furthermore, the “capital conundrum” (the problem of mobilising enough money to get cooperatives off the ground) could be confronted by establishing a government funding body or public bank(s) that can offer an alternative to VC funds and commercial banks and begin to close the funding gap between large, for-profit platforms and alternative models.

## 9 Policy recommendations

The platform as an infrastructure for connecting people to goods and services can provide an enormously useful function. Given their collaborative, networked nature, platforms also have great potential to be organised through multi-stakeholder models of governance, giving suppliers and users of the platform genuine voice and control. As discussed above, the democratic potential of the platform is corrupted by the existing political economy of platforms. Platforms, and especially commission platforms, require size to become profitable and (often ruthlessly, as the example of Uber shows) strive for market dominance. Buttressed by network effects, these platforms often effectively run a natural monopoly and collect fees in a rentier-like manner. From this position of power, the voices of workers and users can too often be ignored.

We need to rescue the socially useful role of the platform and unlock its democratic potential. To do that, we have to scale co-owned or democratically managed platforms that fulfil socially useful functions. However, a number of problems need to be solved in order to realise this. We believe that in order to address these problems, various bottom-up and top-down strategies need to be developed based both on geography and the evolving political economic context. In this spirit, what follows are a series of potential public policy proposals with commentary on their applicability (or lack thereof) to either the current US or UK context. These proposals are not necessarily intended to constitute an integrated plan, and adopting one proposal or another would, inevitably, have intended and unintended implications for the details and applicability of other proposals.

### — Democratic public ownership of major platforms

Increasingly, major platforms are becoming public utilities, characterized by: providing services that cannot be efficiently or easily replicated; providing services under monopoly or near-monopoly conditions; providing services that are considered a vital good that people have a right to; providing services that are in demand (or are experiencing stable demand); providing services that require large-scale investments over time to maintain the underlying infrastructure or assets; and, crucially, presiding over networked infrastructure that exhibits powerful economies of scale.

Historically, the two main public policy options for dealing with utilities (and especially natural monopolies) are regulation and public ownership. In the US, either option is possible as it relates to the dominant platform companies. However, due to the fact that many platform companies are headquartered in the country, public ownership is, at least conceptually, more possible in the US than it is in the UK. As such, we recommend that policymakers in the US pursue an ownership approach (while still acknowledging the possibility of regulation), and policymakers in the UK pursue a regulatory approach (while still acknowledging the possibility of ownership).

As the recent historic investigation by the US House Antitrust Subcommittee demonstrates, the dominant platforms are able to maintain control over and ownership of the main functions of the Internet due to the natural monopoly problem inherent to network effects, switching costs, data switching costs, and economies of scale. As previously mentioned, calls for a renewal of antitrust, breaking up Big Tech, and public utility regulation are valuable but insufficient by themselves to sufficiently resolve these issues and align the Internet with its democratic ideals. Rather, what is needed is to “get the institutions right,” to use Elinor Ostrom’s words.<sup>141</sup>

In the US, the federal government should investigate ways in which to take the large platform companies into democratic public ownership, along with the legal authority to do so, the appropriate government agency or enterprise to lead the process, and the optimal sequencing that would maximize public benefit and minimize private-sector profiteering from the sale. This could include: 1) short-term acquisition of a majority ownership stake of 51% or more of each firm; 2) short-term acquisition of a controlling stake in each firm (less than a majority stake but more than any other single shareholder); 3) a longer-term process of mandating shares be transferred over time into a publicly owned fund (a variant on the Swedish Meidner Plan); and/or 4) breaking up large platforms and tech companies and requiring that their constituent parts be re-organised under public or other forms of democratic ownership (a combination of antitrust and ownership strategies).

As we have detailed in previous reports in this series, as well as various other published material, the concept of public ownership stakes in major companies and economic institutions is commonplace around the world and throughout history.<sup>142</sup> This includes the United States where the government has, at various stages, taken ownership stakes in banks, railroads, manufacturing companies, auto-makers, insurance companies, mines, and many more.<sup>143</sup> In terms of deciding which platforms might be taken into public ownership, and the metrics and measures for making such decisions, the following section on public utility regulation in the UK has some useful starting points that could be adapted to the US context.

Under public ownership, these platforms could ultimately be decentralized into local and regional public entities and federated together into national networks where necessary. Most importantly, however, will be embedding democratic principles throughout the ownership and governance structures of these new institutions. First and foremost, if ownership stakes are taken in major platform companies, they should likely be held in an autonomous public trust (or similar vehicle) organised according to democratic and multi-stakeholder principles (with the trust fully authorized to exercise the voting rights associated with the shares). While the government could be one stakeholder in such a structure, it would not be the only one. This could insulate the public trust both from political pressure (and shifting priorities every time party control shifts in Washington) and privatisation pressure. Second, once in public ownership, the platforms companies themselves should be restructured to embed both democratic structures and new common good values and principles. For more details on what

this might entail, the 2019 report *Constructing the Democratic Public Enterprise* (authored by Andy Cumbers and Thomas M. Hanna, the latter also being one of the authors of this paper) may be instructive.<sup>144</sup>

Of particular concern will be embedding anti-surveillance and pro-data privacy values into these new publicly-owned platforms. The current business model of Amazon, Facebook, Google, and the other firms that could potentially be candidates for public ownership is inherently dependent on mass data collection and utilization for profit, and any shift into democratic public ownership would need to strategically remove this entire orientation. As any strategy for democratic public ownership is developed, a key question is which existing data regimes within these firms ought to be ended entirely (similar to the strategy of nationalizing and then winding down or transitioning fossil fuel corporations to end extraction and deal with climate change).

This cannot be an afterthought, as it would introduce the unacceptable risk that the new public platforms will face incentives and pressure to collect, monetize, and/or misuse data (including sharing it with government agencies engaged in surveillance and social control). Rather anti-surveillance and privacy values and rules should be included in any and all enabling legislation. Another option would be to pass legislation enabling democratic public ownership subsequent to, or in conjunction with, the establishment of a strict national data privacy framework such as Senator Sherrod Brown's Data Accountability and Transparency Act (including, potentially, codetermination of data and data trusts as described below).

#### — **Public utility regulation**

The UK Government's options are more limited when it comes to US-based platforms. As a result, instead of pursuing a public ownership strategy, it should seek to regulate the major platforms as utilities in terms of their operation in the UK through a new Office of Digital Platforms. We recognise that a similar body has been proposed in the Furman Report (Digital Markets Unit) and that the Digital Markets Taskforce is currently advising the government on issues of antitrust regulation. However, the Office of Digital Platforms would concentrate regulatory competences and make more consequential use of the tools at its disposal.

Regulating private operators as utilities when they provide essential functions is of course not new. In such instances, government regulation sets fair and non-discriminatory terms and rates of service. This is already the case with many services in the telecommunications sector. For example, the Office of Communications (Ofcom) has a range of powers covering the provision of broadcasting, telecommunications, and postal services. As yet, this regulatory oversight has yet to extend to large parts of the digital economy, including the platforms, even though they provide services that are becoming arguably at least as important as broadcasting, telecommunications, and post in determining socioeconomic outcomes – and are foundational to our ability to communicate.

Not all services or functions provided by digital platforms are equivalent to public goods or are vital infrastructural services in a digital economy. However, we believe there are a number categories of platform activity as identified by the recent House antitrust investigation that, because of the essential and non-substitutable nature of the services being offered (and the market dominance the leading platform in that area typically has), mean they effectively function as utilities. These include:

- Online search (Google)
- Online commerce (Amazon)

- Social networks, social media (Facebook)
- Mobile app stores (Apple, Google)
- Mobile OS (Apple, Google)
- Digital mapping (Google, Apple)
- Cloud computing (IaaS, PaaS, and SaaS) (Google, Amazon)
- Voice assistants (Amazon, Apple)
- Web browsers (Google)
- Digital advertising (Google, Facebook)

Not all platforms providing these services should necessarily be regulated as utilities. Metrics for the application of regulation in these five core areas could include whether a platform is in a dominant position within the market, based on total market share by turnover in the UK market, total traffic, percentage of users, or other measures of activity. In general, we believe that where services are essential and non-substitutable then the providing platform should be subject to regulation as a utility, regardless of their size.

In practice, for example, this would mean that not all of Alphabet's activities would be regulated like utilities. Research and development like DeepMind, services like Google Pay and products like Chromecast would not be covered. But where it provides a utility – the most obvious example being Google's search engine, the dominant search engine in the UK and globally – it would be subject to regulation as a condition of operation.

As such, we recommend that platforms that provide one of the core services listed above in positions of monopoly should be considered to be regulated as utilities, and should be required to have a licence to provide services to UK customers. The Office of Digital Platforms should use utility rate-making to fix the prices that platforms regulated as utilities can charge to customers, including advertising companies and indirectly consumers and workers. This should limit the percentage profit margin, measured as EBIT (earnings before income and tax), bringing it in line with that of other regulated utilities.

Alongside this, the Office should have new powers for the public benefit, including:

- The power to intervene and regulate data collection practices and uses, including, for example, banning the use of certain types of social data for the development of credit scoring, as well as being able to restrict or prohibit the collection of data in certain scenarios where there are clear citizen, consumer or economic detriments.
- Powers to investigate the potential negative effects on suppliers to the platform, which might suffer from the dominant power of the platform, accompanied by remedial powers if suppliers are being unfairly impacted.
- The ability to establish a duty of care for social media platforms for their users, ensuring minimum standards around content published on the platform.
- The power to require companies (and public institutions) to keep audit logs of the data they feed into their algorithms and be prepared to explain their algorithms to the public on request, or as a result of action taken by the Office.

A Central Bank Digital Currency (CBDC) and postal banking system

The lack of public policy around the ascendant fintech industry makes it the next frontier for surveillance capitalism. Just as Google, Amazon, Facebook, and Apple were able to make "land grabs" for their respective platform monopolies, fintech takes this dynamic a step further

by locking in a global future of money itself controlled by private platform capitalists. The scope, scale, and ambition of Facebook's Libra project demonstrates the urgency with which a public digital payments infrastructure needs to be developed and operationalized in order to head off this eventuality.<sup>145</sup> If Libra or another private actor steps in to create a cryptocurrency and digital wallets system, the private capture of public money by the financial sector will be taken a magnitude further by incorporating platforms' natural monopoly dynamics.

The "public option" discussions occurring with policymakers and central banks generally coalesce around the idea of establishing a central bank digital currency (CBDC) as the public digital payments infrastructure. There are three elements to consider incorporating into a CBDC: 1) a digital wallets platform (i.e., where the value is held); 2) the digital currency technology (i.e., how the value is held); and 3) a postal banking system, or the CBDC's adjacent physical architecture.

With regards to digital wallets, the main proposal under consideration and debate in the US context is for the Federal Reserve to give individuals, businesses, and institutions access to a bank account directly with the central bank (known as "FedAccounts"), rather than this being solely a privilege for banks.<sup>146</sup> These FedAccounts would be accessible via a digital platform (similar to familiar mobile banking interfaces) and postal banks (elaborated on below). As a public option for basic banking services, Ricks, Crawford, and Menand suggest that this could offer a number of consumer advantages, including: no fees or minimum balances, higher interest return on balances, real-time payments, and no interchange fees. Two notable macroeconomic consequences of this are: 1) the central bank's primary monetary policy tool – Interest On Reserves (IOR) – would be significantly more effective in managing inflation by having a direct immediate impact on bank accounts, rather than being mediated by extractive financial institutions; and 2) the federal government would have a direct mechanism for "UBI helicopter drops" as a new monetary policy tool, simply marking up every FedAccount by a fixed amount.

There is significant ongoing discussion and debate about the CBDC and FedAccounts ideas – such as Robert Hockett's proposal to sequence the adoption of FedAccounts first through existing TreasuryDirect Accounts and Saule Omarova's focus on the asset side of the central bank ledger in a CBDC scheme and proposals to shift all demand deposits to the Federal Reserve outright (rather than offering FedAccounts as a public option) – and the exact details will likely need to ultimately be hammered out by a committee/commission of experts or through the legislative drafting process.<sup>147,148</sup>

With regards to currency technology, in order to ensure the principles of privacy and anti-surveillance are properly integrated into the digital architecture, the underlying technology design should ensure the currency unit is as "cash-like" as possible by diverging the wallets system, described above, from the currency itself.<sup>149</sup> The legally usable "Treasury Notes," "Digital Dollars," etc., instead of being a ledger-based currency, should function as "currency bearer instruments" (i.e., those who "bear" the unit hold the value directly, rather than indirectly via a ledger system).<sup>150</sup> Analogous to the current use of multiple layers for verifying paper notes (e.g., barcodes, watermarks), "cash-like" instruments would contain cryptographically-secure components for verification without the need to go through a centralized or distributed ledger.<sup>151</sup> This provides a base level privacy-preserving digital currency infrastructure that allows public and private fintech services to be built on top of it, including digital wallets platforms such as FedAccounts. The argument against "cash-like" digital currency rests on fearmongering of financing terrorism, gangs, and black markets, but avoiding confronting this proposed privacy trade-off in the CBDC's design would build an expansive backdoor for state and corporate

surveillance, even if not utilized initially.

Postal banking has similarly seen much debate recently. The US had a postal banking system from 1910 to 1967, offering basic banking services at post offices across the country.<sup>152</sup> Since the above CBDC proposal intentionally maintains the physical cash option, postal banks could provide the interface for users to access their accounts via tellers and ATMs. This establishes the value of maximum inclusivity, ensuring this payments infrastructure is accessible to everyone, not just those able to utilize digital services via an app or website.

Representative Rashida Tlaib's recent Covid-19 relief legislation, known as the ABC Act, is instructive for how this three-prong system would operate. It proposed providing every person in America with swipe cards that automatically added \$1,000 to the balance monthly through a year after the crisis concluded.<sup>153</sup> The cards' accounts would function similar to the FedAccounts public digital wallets and the use of swipe cards builds in a privacy-preserving currency instrument. The swipe cards would be distributed via mail request, in-person pick-up at FDIC-insured banks, post offices, and through targeted at-risk outreach to the elderly, homeless, disabled, and remote areas by a dedicated outreach corps. This ensures those most in need of inclusion of this relief and payments infrastructure are included, rather than allowing an underclass to remain in dire need due to a lack of administrative care.

With regards to political feasibility, this dual proposal (a CBDC and postal banking system) is featured in the Biden-Sanders Unity Task Force Recommendations report released following the contentious 2020 Democratic presidential primary, signalling the potential for the policy to emerge as a consensus for the party's movement and establishment wings.<sup>154</sup> It is imperative for this proposal to abide by DPO principles in order to ensure the path dependency of this new digital payments infrastructure remains bound to the public interest rather than captured by private rentiers; Wall Street and Silicon Valley will make significant lobbying interventions to do so.

### — **A 21st century “New Deal” for workers and unions**

There is nothing innate in the concept of the platform that means that work organised through it should be precarious, badly paid, or lacking in control. That this is often the reality for platform workers instead reflects a weakness of regulation and the wider power imbalances that US and UK employment law generates in favour of management and capital over workers and labour.

To address this, a new set of labour rights should be introduced to ensure work organised through platform intermediaries is secure and decent. This could be done through standalone legislation and regulation targeting platform companies in their current incarnation, or embedded into the governance and management structures of new platform entities (like the ones previously described). In doing so, a comprehensive agenda for reimagining work for all can ensure we emerge from the current Covid-19 crisis with a fairer, more secure, and equitable world of work. This 21st century “New Deal” for work should include:

- The creation of a new ‘worker’ legal status to cover all existing employees and workers, including agency workers, dependent contractors, and people on zero-hours contracts, helping end bogus self-employment/independent contractor status and raising the floor for all.
- All workers should benefit from a guaranteed, strong set of rights from day one, including statutory redundancy pay, sick pay, family-friendly rights including maternity, paternity, and adoption leave, holiday pay, protection from unfair dismissal, a clear setting out of their pay and conditions including hours, payment for breaks during

shifts, and union rights.

- As the English and Welsh Trade Unions Congress (TUC) set out in their response to the Taylor Review and was established in California's "Gig Workers law" (AB 5), there should be a statutory presumption that all individuals qualify as employees unless the employer can demonstrate that they are genuinely self-employed.<sup>155</sup>
- An end to zero-hours contracts, replaced with contracts that provide a minimum number of guaranteed hours and have a premium rate for overtime.
- A new duty to provide harassment-free workplaces and the inclusion of socio-economic status in protected characteristics.
- To ensure workers can enforce their rights where breached, the Supreme Court ruling that triggered the abolition of tribunal fees should be retained.
- The successful sectoral licensing approach of the Gangmasters Labour Abuse Authority (GLAA) should be extended to types of occupation that suffer from high levels of exploitation and insecurity, including sections organised increasingly through the platform economy.

Alongside new workers' rights, action is needed to reform the US and UK's legal framework which governs trade union rights. In the UK, the Institute for Employment Relations recently found that trade union rights "are the most restrictive in the Western World. This is indisputable in relation to the right to trade union autonomy, right to strike, and the right to bargain collectively."<sup>156</sup> In the US, union density is at historic lows for the modern era (just 10.3% as a whole, and 6.2% in the private sector) due to decades of hostile public policies and jurisprudence.<sup>157</sup>

To address this, collective sectoral bargaining should be re-introduced (or introduced in the case of the US) to cover pay and conditions, working time and holidays, dispute settlement, job security, health and safety, gender equality, workplace equalities relating to ethnicity, class and other protected characteristics, pensions, and training and development. This will improve working conditions and pay, reduce wage inequality, support good employers, improve productivity, and strengthen workplace democracy. While sectoral bargaining should be rolled out in many key sectors of the economy, a particular focus should be ensuring that it covers work performed and organised through platforms.

The use of sectoral bargaining and stronger forms of enterprise-level collective bargaining agreements to organise the terms and conditions of platform work is increasingly at the cutting edge of labour relations, with, for example, a wide range of agreements now in place in the Nordic nations.<sup>158</sup> It is vital that in the US and UK we not only expand collective bargaining across the wider economy but also ensure that these mechanisms for rebalancing voice and power are also extended to platform work. Doing so will enable both workers and companies to adapt to new forms of work. Moreover, it will ensure the collective voice of workers shapes the design of company strategies, particularly those that relate to the deployment of new technologies and ensure the gains of new technologies are fairly shared among capital and labour.

New deliberative and multi-stakeholder bodies or agencies to set and enforce standards around data collection and speech

Decisions about what types of data should be collected, how data is collected, and for what purposes data can be used should not be the prerogative of multinational corporations or distant state authorities. The same applies to decisions around what should or should not be considered acceptable speech and content on social media platforms. Instead, a new

autonomous and deliberative multi-stakeholder body or agency should set standards and principles around what data can or should be collected and determine the contours of its use within the UK and US. The same body or agency could, conceivably, also set standards for content on social media platforms, but this may also be a separate body organised around the same democratic principles and participatory and deliberative ways of making decisions.

The goal should be to ensure all stakeholders – workers, residents, community organisations, businesses, and more – can collectively shape the rules and regulations concerning data collection as well as the development and application of data technologies in their communities and workplaces, technologies which intimately pattern how we live and work. Without this countervailing force, data collection and digital technologies are likely to amplify existing inequalities in society, worsen forms of surveillance and oppression, and lead to unchecked data extraction.

The agency should be both a regulatory and advisory body, on the one hand endowed with the authority to limit or prohibit the collection of data that has harmful and oppressive consequences (within the context of established law); and on the other, tasked with making recommendations and drafting new legislation as it relates to data privacy, collection, and use. Alongside this, the agency should help develop and enforce a new “bill of rights” relating to the collection and use of data that would focus on rebalancing power in the digital economy. While these “rights” should be developed by a deliberative and consultative planning process, we suggest that they might include:

- The right of workers and communities to collectively determine how data collection and analysis technologies are introduced, including a final say on the introduction and use of surveillance and monitoring technologies. This includes ensuring that workers and others can co-determine the development and deployment of Artificial Intelligence (AI) systems and have a say in what data is collected in the workplace and how it is used. It also may include ensuring that local governments have new powers to shape the development of the physical landscape where companies are scraping data from the public,
- The right to have full transparency in AI systems and how they intervene through the adoption of an algorithmic “black box”. This would be a device that records information about how AI and data systems work and record all decisions (and decision-making trees). This data should be easily accessible, understandable, and uncomplicated, enabling people or groups to quickly understand how technical systems operate and their effects on working conditions.<sup>159</sup>
- The right to co-design algorithmic systems that form decision-making processes and impact on working conditions (including around financial decisions, such as mortgages) as well as approaches to algorithmic accountability.<sup>160</sup>
- The right to access and use data generated by workers or publics in defined areas to improve social and working conditions, including protecting “time sovereignty” – the ability to exercise control and balance over one’s own work time – and to strengthen the hand of the labour during collective bargaining negotiations.<sup>161</sup>
- The right to a “human-in-command” approach, whereby public bodies can determine how legal control and responsibility over machines is exercised, including a right of explanation over machine-based decision-making processes.
- The “right to disconnect,” based on the French model where a series of sectoral bargaining agreements have ensured workers are not required to send or answer emails outside of work hours.

- The right to ban certain forms of data collecting or analysis when it infringes on the privacy, rights, or wellbeing of the workers and the wider public.

The power to observe and record is an ever-more powerful one in the digital age. Hitherto, the lightly regulated practices of platforms and states has led to a deep imbalance between these undemocratic actors and the wider population. Embedding a new and proactive set of principles and standards for the collection and use of data can begin to reverse this.

Establish a new network of ‘data trusts’ to provide citizens with access and democratic control over data that can improve their lives.

It is important to not just democratise the rules, regulations, and decisions around data collection (and non-collection), but to also transform the control of data from a system dominated by corporate enclosure to a data commons. One vital way to do this is through data trusts – an autonomous legal body that acts as a custodian and steward of a specific data set, making sure that the data is shared safely and democratically.<sup>162/163</sup> A data trust could help build the policy foundations for a process of data commoning – guaranteeing that collective data is anonymised, decommodified, and working towards public interests, rather than serving the shareholders of platform monopolies.<sup>164</sup>

We recommend that a new network of data trusts be established, specifically the establishment of sectoral and place-based data trusts. The Open Data Institute has recently recommended several best practices for data trusts (based on three pilots), and these should be incorporated into how these data trusts are established, structured, and governed.<sup>165</sup>

With regard to sectoral data trusts, the asymmetry in information between workers and employers – heightened by inequalities in access to data and the insights it generates – further cements power imbalances at work. This is arguably most pronounced for workers whose activities are organised via digital platforms. To address this, relevant sets of data should be made accessible to workers and trade unions, at both the enterprise and sectoral level. By providing them with a better view of both individual and aggregate earnings, conditions, and employment status, the pooling of data can enable workers to better understand their work and conditions and help unions better organise, campaign, enforce existing rights, and collectively bargain. As Worker Info Exchange argues, it can help workers in the platform economy gain employee status recognition or enable trade unions to use information as leverage for collective bargaining to improve pay and conditions.<sup>166</sup>

As part of sectoral collective bargaining agreements, companies should be required to provide to the “sector data trust” a set of agreed datasets, such as wages, conditions, and employment status of the workforce, suitably anonymised with respect to privacy. Trade unions, individual workers, and civil society organisations would be able to request access to the data from the data trust. The trust should provide analytical support to help users analyse the data, generating insights that can help them intervene more effectively in the workplace.

Similarly, place-based data trusts should pool data to improve local governance. Data on traffic, transport, housing, tourism, etc. should be made available so better, more democratic decisions can be made in domains that directly impact citizens’ livelihoods. To many citizens, planning decisions in their communities remain obscure. In some cases, crucial data and analysis remain in private hands. For this reason, place-based data trusts could and should champion the principle of deliberation and co-determination. This is not only crucial to prevent abuse of data sets but also ensures that they benefit all stakeholders. Platforms operating in a place-based data trusts’ area (e.g., Uber, Airbnb, Google Maps or, ideally, new public and cooperative platforms) should be required to provide the data trust with the collected data in

order for it to be available for public use (with sufficient privacy and access guidelines). Public actors should also make an effort to feed their data into trusts more systematically.

### — **Public Platform Accelerator, National Lab System, and Public Digital Cooperatives**

The VC approach to incubating data and platform startups has fueled a digital economy wrought with extraction, monopolization, work precarity, and social control. Three new public agencies, a Public Platform Accelerator (PPA), a National Lab for Community Data (NLCD), and a network of Public Digital Cooperatives could play a central role in providing an alternative for scaling new democratic technologies.

The PPA would be tasked with developing platforms that replicate existing platforms, but with a key difference: the platforms created would be not-for-profit, with fee structures designed to maximise the utility of the platform for its users and workers not returns to its investors, and the governance of the platform would be multi-stakeholder. Foundational for this would be the development of basic software that can then be used by others as a platform development kit. The platforms developed would have a plug-in and play aspect - i.e. local groups, from local authorities to community groups, could use the products developed by the PPA to develop local iterations but have the support of the larger technical infrastructure and branding of national organisation to help it scale and get new users.

For example, the creation of a mobility platform could function as either a nationwide wide platform, or potentially be adopted and tailored to local needs by, for example, the Greater Manchester Combined Authority or New York City Council working in partnership with local taxis and other mobility providers, connecting users to the platform, providing good work for drivers, and setting socially useful goals for the platform, such as requiring the transition to electric vehicles. Place-based platforms could link up with an overarching national platform in a federated structure in key areas such as mobility and the rental market.

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When it comes to data, we recommend further investigation of Julia Lane's National Lab for Community Data (NLCD) proposal and how it could potentially be developed in addition to, or in conjunction with, codetermination around data collection/use and democratically governed data trusts. The NLCD system, Lane explains, would function as a comprehensive public data infrastructure "taking the pieces of the [US] national lab system as a model for R&D and funding, and the model of Land Grant universities for training, coordination, and outreach" to translate the lab's work to the local data needs of citizens.<sup>167</sup> She references the Institute for Research on Innovation and Science (IRIS) at the University of Michigan, established in 2015, as a successful precedent of a public data institution built around community participation and the principle of affected interest (in this case, research institutions).<sup>168</sup> Lane proposes incorporating local multi-stakeholder governance via formal networks between the labs and universities and state and local government agencies while maintaining the system under a national model in order to ensure national comparability, longitudinal consistency, and quality.

Another proposal potentially worthy of consideration, adaptation, and adoption is Dan Hind's British Digital Cooperative model – generalized here to Public Digital Cooperatives (PDCs) – which establishes digital labs in disinvested communities, overseen by citizen assemblies to ensure they fulfil their mandate "to develop the infrastructure of a more complete social, economic and political democracy."<sup>169</sup> While the PPA and NLCD function as nationally directed R&D agencies, the PDCs would develop the "digital feedback infrastructure" for public data and platforms to be created and utilized in the public interest as defined by the citizen assembly. Project engineers of the digital labs, acting as civil servants, would interface with the assembly to intake projects, co-create strategic plans for their development and implementation, and

place the final product in an open-source data and IP commons. Restrictions on accessibility to this commons would be based on the “Five Safes” framework: safe projects (justified utility of the data), safe people (authorized usage of data), safe settings (e.g. FedRAMP data storage standards), safe data (de-identification), and safe outputs (minimizing re-identification risk when analysis is published).<sup>170</sup>

While the citizen assembly would provide the mandate ultimately informing the PDCs work, some ideas include platforms for democratic participation (to be used by the citizen assemblies themselves), search engines showing individuals the public and private data analyses of which they are a subject (and the ability to opt-in or out of these analyses), and/or data sets and tools that support anti-gentrification work (for instance with regards to geo-spatial mapping and local property/land values).

It should be noted these three models as described above are not mutually exclusive and could provide important services to one another. For example, the PPA's focus on platform development inherently includes the need for sound data architecture; the PDC's citizen assemblies could play a role in shaping the strategic direction of the PPA or NLCD; and the NLCD's data would be critical to decisions by the PDC's assemblies on what technologies to implement locally. On the other hand, not all of these models are likely necessary (or desirable) in every jurisdiction. The purpose of proposing these particular models is to simply suggest further creative development of an institutional arrangement from the bottom up that best meets the challenges laid out in this report along the goals and principles of democratic public ownership.

#### — **Digital community wealth building**

Towns, cities, and regions should be in the vanguard of charting a new digital future. In conjunction with, or in addition to, many of the proposals suggested above (including data codetermination, data trusts, and the PPA, NCLD, and PDC), digital Community Wealth Building strategies should be at the forefront of how we reimagine how data is generated and used and how digital platforms and infrastructures are developed and owned – with the overarching goal of seeking to retain and grow value in place.<sup>171</sup> In doing so, they can help towns and cities regain control of data, democratise urban technologies, and move beyond unequal neoliberal growth models.<sup>172</sup> The more judicious collection and effective curation of public data should help enable the creation of locally specific tools and services. It could also be undergirded by the development of other public digital infrastructures, like a public cloud or publicly funded and accessible computing capacity to broaden who can analyse data at scale, organised on different principles to commercial competitors

While being flexible to the particularities and needs of local communities and economic geographies, each strategy should be underpinned by four key principles and aims: 1) shifting the legal regime around data to make it democratically governed and less susceptible to misuse; 2) ensuring open and interoperable data wherever possible and appropriate (with stringent privacy safeguards); 3) reclaiming digital infrastructure, including democratising both access to data and analytical capability; and 4) using public procurement to open up private data.

In particular, digital Community Wealth Building approaches could include measures that:

- Encourage innovation in the digital delivery of local services, including by public authorities, civic organisations and social enterprises. This could range from using data to provide local mobility, healthcare, and democratic services to more effective economic coordination or environmental tools;

- Build local digital infrastructures that are open source and favour interoperable, neutral architectures instead of locking local government into privately provided and closed digital systems that extract and enclose data and its resultant value;
- Open up data from the private sector through the use of public procurement conditions. As is increasingly happening in leading European towns and cities, local authorities can use public procurement to open up the data generated by private companies through their interaction with the public realm, making it a condition of procurement contracts;
- Pluralise ownership within the digital economy through the local authority actively encouraging the development of new digital services by innovative companies with a range of ownership models, including social enterprises and cooperatives.

#### — **Financing via national investment banks**

Undoubtedly, the question of how to finance these proposals will be raised. The primary answer to this must be rejecting austerity and advocating direct federal spending in the form of non-discretionary support for the above proposed institutions (PPA, NLCD, PDCs) and purchasing dominant platforms to bring them into democratic public ownership. As a supplement to this, in order to close the financing gap for platform co-ops and public platforms and to further the development of democratically governed data trusts, data labs, and/or digital community wealth building approaches, there should also be a viable and scalable alternative to VC funding. This could be accomplished by the establishment of a network of local and regional public banks, led at the federal level by a National Investment Bank (NIB) (funding for which could be provided by either budgetary appropriations or central bank spending).<sup>173</sup>

The NIB and its subsidiary financing entities would have a mandate to provide lending only to digital economy firms and structures that abide by democratic and shared ownership principles. Public financing generally should be restricted to firms that abide by such principles in order to facilitate the development of a genuine democratic economy, but this is even more critical as platforms take root in designing the future of how production, consumption, exchange, use, and creation take place in the economy. In addition to the democratic principles spelled out in several of the previous recommendations, another source of inspiration is “Exit to Community” (E2C), an alternative framework for startup development toward genuine social entrepreneurship recently launched by the Media Enterprise Design Lab and Zebras United.<sup>174</sup> This would answer the problem of innovation “kill zones” with a democratic alternative that drives innovation in the public interest.<sup>175</sup>

Additionally, a NIB could play a role in supporting some of the proposed “top-down” strategies as well. For instance, when bringing the monopoly platforms under democratic public ownership, one option would be for the public trust (or holding company) to be a subsidiary of the NIB and function as part of its larger industrial policy. And while the CBDC and postal banking system provides the much-needed public digital payments infrastructure, a full-scale counter to the private banking sector requires the complement of a public lending and finance institution.

# 10 Conclusion

When it comes to platforms and data, we are at a critical juncture. Technology is political. How technical systems operate and in whose interest is not fixed nor certain. We can reimagine technologies to expand the realm of human freedom. However, though the approaches and institutions that have developed over the past decade are still in their early stages, the window for change is closing fast. The in-built drive to monopoly in the platform economy – which is currently a feature, not a bug – is consolidating vast wealth and control in the hands of a small number of tech giants and their shareholders. This consolidation of power is in turn creating increasingly harmful economic and social effects, from surging inequality and the growth of precarious forms of digitally-organised work, to ubiquitous surveillance and the rise of biased algorithmic management. Moreover, these baleful trends have been accelerated by the effects of Covid-19, leaving us more unequal and more insecure.

The digital monopolies are poised to dominate the commanding heights of our economies for the foreseeable future; and the decisions we make now are critical. Unless democracy can reimagine how platforms operate and for whom, their power will only entrench further. The challenge is to liberate the potential of the platform to connect, communicate, and coordinate from the logics of concentrated corporate ownership and profit maximisation that currently shape their operation. This, though, will require a newly ambitious agenda that can reimagine how platforms, and the data they – and we – generate, is owned, governed, and controlled.

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