

From a Wage to a Wager: Dynamic Pricing in the Gig Economy

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Under capitalism, the wage has always functioned as an incentive to work. We sell our labour power in exchange for money - paid per unit of time or product/service - so we can survive. In large parts of the gig economy, however, this incentivizing role of the wage has been both amplified and reconfigured: the wage is no longer just an incentive but also becomes an object of prediction and experimentation; a constantly changing figure and shifting target appearing on a gig worker's phone as a peculiar form of clickbait (see image 1 below). If this sounds odd or outlandish, that's because it is - or at least it should be, even though it constitutes the daily reality of millions of gig workers who try to make a living via their apps.

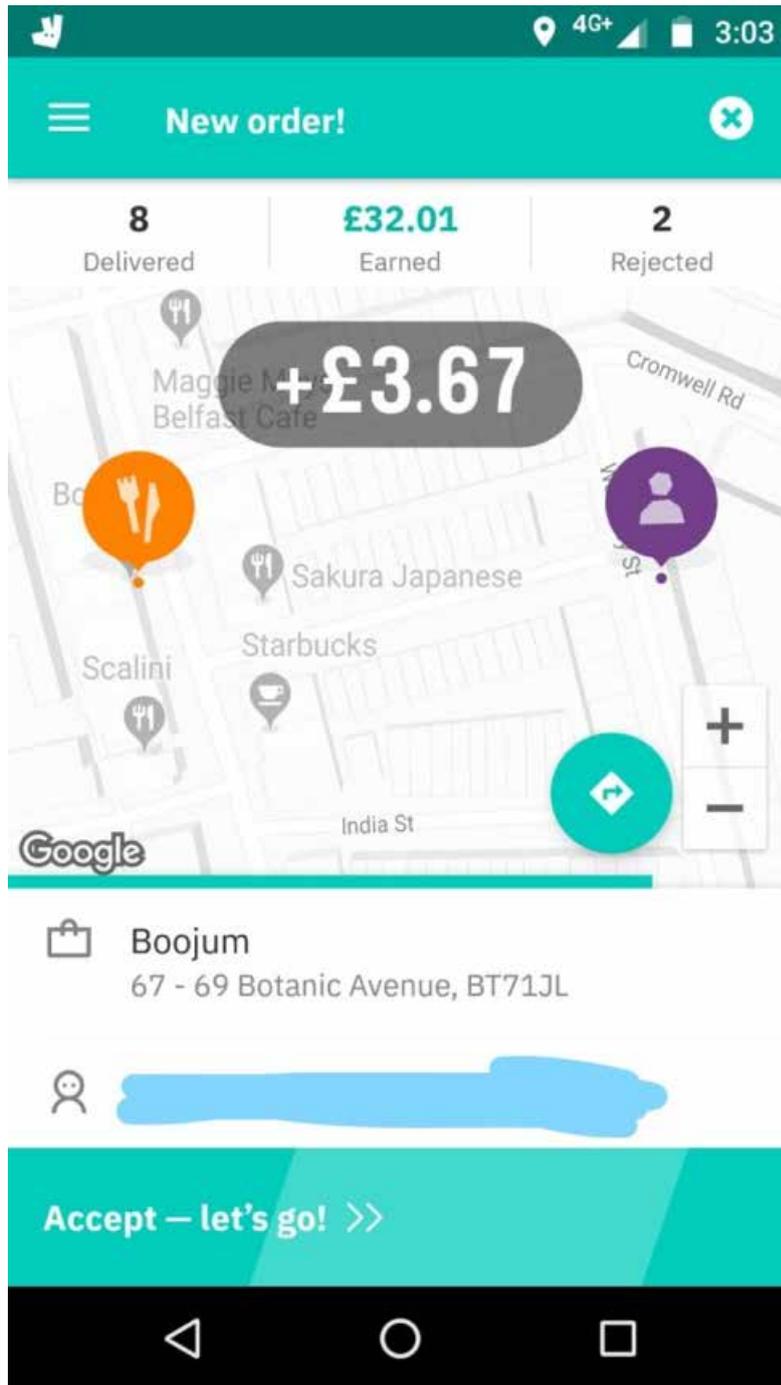
These apps show them gigs that are priced 'dynamically,' meaning that the wage they receive will be 'based on perceived [real-time] changes in market conditions.'¹ While the use of dynamic pricing techniques has existed for quite some time in the world of e-commerce, particularly in the airline and hospitality industries, their implementation in the world of work is relatively novel and - as I will argue - particularly problematic. Such techniques essentially turn the wage into a recurring wager: a series of risky bets animated by the belief or hope that you will be able to cobble together a livelihood one gig at a time. The problem, as research shows, is that the house always wins.

Most sectors of the formal economy have collective agreements and/or legally enforced wage floors in place to ensure that 'the house' - i.e. private employers - does not always win. Yet this is almost never the case in the gig economy, where workers are classified as independent contractors and thus lack access to basic labour protections.² This legal status also bars gig workers from unionizing or collective bargaining. As I will discuss below, this gives corporate gig platforms extraordinary leeway to determine, segment, and adjust workers' wages at any given moment in time, resulting in profound wage insecurity and inequality. I start by providing an overview of various critical and empirical approaches to dynamic pricing and related techniques of wage experimentation in the gig economy. I then discuss some grassroots labour organising initiatives and one thought-provoking regulatory response that have pushed back against these developments. Finally, the closing section offers three policy recommendations, based on the preceding discussion.

1. Aaron Shapiro, "Dynamic Exploits: The Science of Worker Control in the On-Demand Economy." Media, Inequality & Change Center. 21 March 2019. <https://mic.asc.upenn.edu/media-inequality-change-center-launches-inaugural-report-dynamic-exploits-the-science-of-worker-control-in-the-on-demand-economy/>.

2. For a rare exception, see Julian Hale, "In Denmark, a Historic Collective Agreement Is Turning the 'Bogus Self-Employed' into 'Workers with Rights,'" Equal Times. 4 July 2018. <https://www.equaltimes.org/in-denmark-a-historic-collective>.

Image 1. Screenshot showing a Deliveroo order and a wage



Dynamic Pricing

As Melinda Cooper has suggested, '[u]nder post-Fordist conditions, the wage itself has become something of a speculative proposition,' one that is contingent on 'unspecified hours of unpaid work readiness' and 'conditional on the achievement of performance indicators.'³ On gig platforms, the contingency of a worker's wage is not just connected to unpaid, unpredictable waiting time (e.g. in between rides or at a restaurant) but is also amplified by pricing algorithms that turn this already 'speculative proposition' into a hyper-dependent variable whose process of determination is hidden as a trade secret. I am thus primarily concerned with the algorithmic price-setting power of gig platforms - a power that is not only market-making but also potentially livelihood-taking.

Price can be understood as 'a productive force, organizing and shaping the relation between markets and persons,'⁴ by engendering 'incipient forms of inequality' and inflecting 'the relationship of the present to the future.'⁵ While price is generally conceived as a signal that enables one to engage in calculative activities such as 'imagining and estimating courses of action,'⁶ recently 'the possibilities of understanding that signal in meaningful ways are changing' under the influence of dynamic pricing techniques.⁷ Accordingly, app-based workers are having a much more difficult time estimating their future income and the attendant courses of action required.

Recent work on dynamic pricing in the fields of economics, information science, and operations research has been grappling with questions regarding the optimization of financial and behavioural incentives in order to achieve a gig platform's desired just-in-time service level in the most cost-efficient way possible.⁸ Securing an optimal service capacity in a volatile marketplace remains a challenge for ride-hailing and food delivery platforms alike. After all, while the imposition of app-based management techniques can to a large extent shape how gig workers do their job, such techniques provide less grip on when and how much they work, because this workforce is largely composed of independent contractors who can - at least

3. Melinda Cooper, "Workfare, Familyfare, Godfare: Transforming Contingency into Necessity," *South Atlantic Quarterly* 111, no. 4 (2012): 646.

4. Liz Moor and Celia Lury, "Price and the Person: Markets, Discrimination, and Personhood," *Journal of Cultural Economy* 11, no. 6 (2018): 501.

5. Lisa Adkins and Turo-Kimmo Lehtonen, "Price: An Introduction," *Distinktion: Journal of Social Theory* 19, no. 2 (2018): 109.

6. Michel Callon and Fabian Muniesa, "Peripheral Vision: Economic Markets as Calculative Collective Devices," *Organization Studies* 26 no. 8 (2005): 1231.

7. Moor and Lury, "Price and the Person," 502.

8. See, for example, M. Keith Chen and Michael Sheldon, "Dynamic Pricing in a Labor Market: Surge Pricing and the Supply of Uber Driver-Partners," Working Paper, 11 December 2015; Gad Allon, Maxime Cohen, and Wichinpong Park Sinchaisri, "The Impact of Behavioral and Economic Drivers on Gig Economy Workers," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, 29 October 2018); Harish Guda and Upender Subramanian, "Your Uber Is Arriving: Managing On-Demand Workers Through Surge Pricing, Forecast Communication, and Worker Incentives," *Management Science* 65, no. 5 (2019): 1995-2014; Saif Benjaafar and Ming Hu, "Operations Management in the Age of the Sharing Economy: What Is Old and What Is New?," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, 17 April 2019).

nominally - determine their own schedules.

Let us take food delivery as an example. In order to coax freelance couriers to log onto the app, start accepting orders, and keep working as long as is needed, food delivery platforms have had to transform how they approach the notion of a wage and how it is paid out to their courier fleets. Whereas, traditionally, couriers would work directly for restaurants that pay them a set hourly or daily wage (often off the books), to which cash tips are expected to be added with each delivery, most food delivery platforms have not only formalised and automated these financial transactions through an electronic payment system that bypasses the courier (and thus makes it easier for customers not to tip), but have also switched to a piece-rate model in which couriers are paid per delivery. Paying couriers per delivery affords platform companies a much tighter grip on their flexible labour supply, allowing them to design data-driven financial incentives that respond to sudden fluctuations of service demand in a more granular and agile manner. In economic terms, it enables operations managers to better exploit positive wage elasticities.⁹

Incentivising Gig Workers

From a behavioural economics perspective, per-delivery payment schemes come with particular 'reward schedules' whose irregular 'hit frequency' can have a powerful effect on the behaviour of couriers who no can longer count on the security of an hourly wage.¹⁰ When logged into the app and waiting for orders to be dispatched, which is often referred to as receiving a 'ping,' couriers are faced with questions like 'When will I get my next ping?'; 'When I don't get one for a while, what may be the reason?'; 'When I do get one, what happens if I reject the offer - how will it affect my future income opportunities?'

These negotiations are then further complicated by the introduction of dynamic delivery pricing, which reconfigures the piece-rate wage into a dependent variable whose value is usually determined by a combination of the following components: a pickup fee, a drop-off fee, distance-based compensation, (estimated) time-based compensation, and - in some cases/markets - order 'desirability.'¹¹ Crucially, these components are themselves variables whose value and relative share can be continually adjusted in the calculation of the composite fee. Moreover, besides the components communicated by the platform, gig companies likely use their analytics capacity to incorporate additional real-time pricing factors such as market demand, weather conditions, or even a courier's behavioural data.¹² Dynamic pricing

9. Allon, Cohen, and Sinchaisri, "The Impact of Behavioral and Economic Drivers on Gig Economy Workers."

10. Natasha Dow Schüll, *Addiction by Design* (Princeton, NJ: Princeton University Press, 2012).

11. For example, the food delivery platform DoorDash includes a 'desirability' factor into its calculation of order prices, taking into account the number of times an order has been rejected by previous couriers. See <https://www.theverge.com/2019/8/22/20828742/doordash-tipping-policy-change-drivers-earning-more-money>.

12. Ryan Calo and Alex Rosenblat, "The Taking Economy: Uber, Information, and Power," *Columbia Law Review*, no. 117 (2017): 1623-90; Priya Kamat and Candice Hogan, "How Uber Leverages Applied Behavioral Science at Scale," *Uber Engineering Blog* (blog), 28 January 2019. <https://eng.uber.com/applied-behavioral-science-at-scale/>.

techniques and more order transparency together allow for the capture of more data on couriers' situated decision-making processes, enabling operations managers to explore questions like 'What will it take for this courier to accept this type of order?' or 'How far is this courier willing to go for this fee - and what if we add a bonus incentive?'

Back on the courier's side, such experimentation produces new questions such as 'When I get my next order, how much will they offer me?'; 'If I reject this offer, will the next offer be better or worse?' As Schüll notes with respect to machine gambling, the most potent behavioural reinforcement can be achieved through schemes 'in which subjects never know when they will be rewarded, or how much.'¹³ Likewise, platform-mediated food delivery turns into a game-like experience in which couriers are constantly evaluating variable offers (substituting for set wages) intended to incentivise them to work. When an offer is deemed worth the effort, a courier accepts the 'deal' by swiping or tapping the screen and gets going. But to what extent are couriers able to determine if an offer is worth their effort - i.e. whether they should stay or go - and what can they do if it isn't?

Dynamic Pricing as a Distinctive Form of Labour Control

When considering how gig platforms orchestrate modes of algorithmic control and uncertainty, more critical attention should thus be given to the gamified conditions under which a wage can be earned and the loss of grip on these conditions. So far, however, few critical studies on algorithmic management in the gig economy have focused explicitly on the impact of dynamic pricing strategies and/or wage gamification on gig workers' experiences of insecurity - beyond Uber's infamous surge pricing system.¹⁴ When they do, this attention is frequently subsumed under a broader concern with algorithmically mediated forms of labour control.

For instance, an insightful study by Griesbach and colleagues on platform-mediated food delivery work in New York City reports that '[p]latforms do use market mechanisms (i.e. price and choice) to match labor supply with consumer demand, creating frameworks within which workers can strategize to maximize earnings [...] But they do so within the context of technical control systems that shape and constrain workers' choices.'¹⁵ In this account, platforms' use of ostensibly straightforward 'market mechanisms' is thus held to be conceptually

13. Schüll, *Addiction by Design*, 108.

14. For example, see Alex Rosenblat and Luke Stark, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers," *International Journal of Communication* 10 (2016): 3758-84; Luke Munn, "I Am a Driver-Partner," *Work Organisation, Labour & Globalisation* 11, no. 2 (2017): 7-20.

15. Kathleen Griesbach et al., "Algorithmic Control in Platform Food Delivery Work," *Socius: Sociological Research for a Dynamic World* 5 (2019): 5. For a similar analysis set in the Chinese context, see Hao Qi and Zhongjin Li, "Putting Precarity Back to Production: A Case Study of Didi Kuaiche Drivers in the City of Nanjing, China," *Review of Radical Political Economics* (online first).

and operationally distinct from a larger 'context of technical control systems.' In contrast, I would argue that dynamic pricing algorithms are in fact an integral part of the technical control systems that shape the very market mechanisms through which workers' strategic choices are constrained. Importantly, market control is labour control in the case of service work such as food delivery, insofar as the production and consumption of this service overlap temporally and 'the market' thereby coincides with what in the manufacturing paradigm would have been the 'hidden abode' of production.¹⁶

Moreover, as Shapiro has noted, 'control is a pervasive feature of the market's configuration, not an artefact of its algorithmic execution.'¹⁷ Rather than focusing on the role of algorithms per se, his study directs our critical attention to how gig economy platforms 'exploit calculative asymmetries that they design into the market architecture.'¹⁸ Calculative asymmetries are created not just by enforcing information asymmetries but also through the unequal distribution of access to calculative equipment (e.g. analytics engines) and their inputs (i.e. data), which together minimize the calculative agency of gig workers trying to figure out whether a delivery or trip is worth their while. Shapiro's main contribution here is to show 'how the asymmetrical application of [dynamic] price setting allows firms to exert control over labour at the aggregate level while maintaining the façade of autonomy for the individual worker,' which helps to justify the independent contractor classification.¹⁹

The Situation in Berlin and NYC

My own recent research strongly resonates with Shapiro's analysis. Around the time when I was working as a Deliveroo rider in Berlin, as part of my fieldwork, the company introduced its 'distance-based fees' system, which substituted dynamically priced deliveries for the set fee of 5 euros per delivery that had until then been the standard. Although ostensibly based on the distance of a trip and the projected time the company estimated it would take to complete an order, riders were never informed about how fees were calculated - i.e. how much they were being paid per kilometre or minute. This wage obfuscation was met with a growing discontent and frustration among members of the city's rider community, especially among a group of activist riders who were part of the grassroots Deliverunion campaign (see image 2). As I have elaborated elsewhere, some of these riders attempted to gain calculative power by building their own do-it-yourself computational equipment - in the form of a web-based application - that enabled them to collect data on the distances and fees of their deliveries and to subsequently approximate Deliveroo's pricing algorithm.²⁰ This move to advance their calculative grip was then used as a

16. Julia Tomassetti, "Digital Platform Work as Interactive Service Work," *Employee Rights and Employment Policy Journal* 22, no. 1 (2018): 1-58.

17. Aaron Shapiro, "Dynamic Exploits: Calculative Asymmetries in the on-Demand Economy," *New Technology, Work and Employment* 35, no. 2 (2020): 12.

18. *Ibid.*, 2.

19. *Ibid.*

20. Niels Van Doorn, "At What Price? Labour Politics and Calculative Power Struggles in on-Demand

stepping stone to inspire other riders to become involved, not just in the project but in Deliverunion's more comprehensive labour struggle.

In New York City, where I also conducted fieldwork, such an endeavour would have been much more difficult to pull off. There are two primary reasons: first, because delivery workers often use multiple (up to 3-4) different apps, which makes data collection more complex and organising activities more diffuse (which company should be addressed?); and second, because wages are much more thoroughly gamified in comparison to European cities. Each company offers its own daily and weekly bonus incentives, usually presented in game-like formats, which couriers assess and compare in order to determine which app may be most lucrative for them on any given day.

Add to this that couriers frequently use the instant pay-out feature offered on nearly every app and it becomes clear how this way of working resembles the experience of gamblers in the networked, data-driven casinos studied by Schüll.²¹ As they play multiple 'machines' at the same time and evaluate which ones are 'giving them love' and which are 'trash,' they run the risk of being bamboozled by delivery companies deploying wage gamification techniques to conceal the fact that, across the board, the dynamically determined base fees are slowly being adjusted downward.²² So what can be done to curb the calculative and price-setting power of gig economy platforms and ensure that they pay out a decent, reliable wage? This will be the topic of the next section.

Food Delivery," *Work Organisation, Labour & Globalisation* 14, no. 1 (2020): 136-49.

21. Schüll, *Addiction by Design*.

22. Niels Van Doorn and Julie Yujie Chen, "Odds Stacked Against Workers: Labor Process Gamification on Chinese and American Food Delivery Platforms," *Socio-Economic Review*, forthcoming.

Image 2: A Deliverunion flyer inviting riders to a join a meeting and take action



What does the new Deliveroo Payment system really mean?

Will you actually make less money?

Will your pay change in the future?

**In other countries this has resulted in
PAY GOING DOWN!!!**

Experience from other countries show that this is not only a trial. In the end we will all have to use this payment system.

Fellow riders from the UK and France have told us that with the new system they get longer orders and less money per km, and are punished for rejecting orders.

Also here Deliveroo will be able to change our payment fees whenever they like ...unless we do something!



When: Jan. 8th at 15:00

Where: New Yorck im Bethanien,
Mariannenpl. 2a, Kreuzberg

Grassroots Labour Organising in the Gig Economy

Although grassroots labour organising is more challenging in the gig economy, it certainly is far from impossible, as has been demonstrated by gig workers and labour advocacy groups around the world. Indeed, as Woodcock and Cant have argued, the days of emergent struggles against platform capitalism are well behind us and we can discern the formation of a more mature and institutionally robust (even if often fragmented) global movement.²³ Nevertheless, campaigns dedicated specifically to gig workers' struggles against the wage obfuscation and price-setting power of platforms are still relatively rare.

One prominent example in the North-American context is the **#PayUp campaign** organised by Working Washington, a state-wide labour advocacy group. The campaign has formulated three demands - a minimum wage floor of \$15 plus expenses; treating tips as a supplement instead of a substitute; and wage transparency - pertinent to all gig economy platforms but addressed to delivery companies DoorDash, Instacart and Postmates in particular. So far, its biggest labour victory came at the start of 2019, when it played a pivotal role in a wave of worker protests and media attention that eventually pushed Instacart to discontinue a payment scheme using customer tips to subsidize workers' base pay - a scheme facilitated by dynamic delivery pricing insofar as this allows companies to surreptitiously integrate tips into variable offers.²⁴ At the end of 2019, the campaign once again played a central role in organising a nation-wide strike of Instacart workers who opposed how the company disincentivised tipping on the app.²⁵ Moreover, echoing Deliverunion's attempt to gain calculative agency in Berlin, the #PayUp website provides 'calculators' that allow app-based workers to submit their payment data to better understand the composition of delivery offers and how much these pay after expenses.

In the UK, meanwhile, the Worker Info Exchange (WIE) is an organisation that seeks to counter the gig economy's calculative asymmetries by leveraging the EU's General Data Protection Regulation (GDPR) to gain access to all pertinent data Uber (whose European headquarters are in Amsterdam) collects on its workforce. While its interest in driver data - obtained by pooling the outcomes of so-called 'Subject Access Requests' submitted to Uber by individual drivers - is not limited to wage issues alone, one of the organisation's primary goals is to work with data scientists in order to determine how much drivers actually make when taking into account things like idle or 'dead' time, which is a common problem in large markets

23. Jamie Woodcock and Callum Cant, "The End of the Beginning: The Struggles of Platform Workers," Notes From Below, June 8, 2019, <https://notesfrombelow.org/article/end-beginning>.

24. Kevin Roose, "After Uproar, Instacart Backs Off Controversial Tipping Policy," The New York Times, 6 February 2019. <https://www.nytimes.com/2019/02/06/technology/instacart-door-dash-tipping-deliveries.html>.

25. April Glaser, "Instacart Workers Are Striking Because of the App's User Interface," Slate, 5 November 2019. <https://slate.com/business/2019/11/instacart-workers-striking-app-user-interface-dark-pattern-design.html>.

saturated with drivers. To achieve this, however, WIE would need access to drivers' GPS data during periods they are not completing a trip, and so far Uber has failed to make this data available.²⁶

The battle over data has recently made it to an Amsterdam district court, where four UK-based Uber drivers - supported by WIE and the App Drivers & Couriers Union, among others - are appealing to the GDPR to claim not just more comprehensive and consistent data access but also the right to have insight into how Uber's algorithms work.²⁷ The problem with this latter claim, which would include information on the company's blackboxed pricing algorithm, is that algorithmic systems are continually being adjusted to optimise operations and are thus volatile epistemic objects. Platform-governed markets are basically giant experimental sandboxes operating at a velocity designed to resist public transparency, critique, and regulation.

Regulatory Responses: A Minimum Wage for Gig Workers

This means, in turn, that regulation and public policy will have to be more proactive and creative. Perhaps the best example of such regulatory innovation comes from New York City, where, following persistent pressure from the New York Taxi Workers Alliance and the (Uber-approved) Independent Drivers Guild, the City Council and the Taxi & Limousine Commission (TLC) introduced ground-breaking regulations at the end of 2018, setting a one-year cap on the number of ride-hail vehicles allowed on the road and a minimum hourly wage for drivers of US\$17.22 after expenses.²⁸ This wage floor was informed by an inventive city-commissioned study by Parrott and Reich, which produced a payment formula that included the 'utilisation rate' of all ride-hailing companies active in the city, based on data the TLC could collect from these companies.²⁹

This utilisation rate represents the percentage of time drivers have passengers on board, which was found to be very low (58% on average) across the platforms - confirming drivers' complaints about unpaid dead time. As Ongweso concisely explains: 'The incentive, then, was to use utilization rate in the pay floor formula to stop perpetual growth and have drivers spend less time on the road empty, hopefully reducing congestion as well. The lower the utilization rate, the higher

26. Sarah Holder, "For Ride-Hailing Drivers, Data Is Power," Bloomberg CityLab. 22 August 2019. <https://www.bloomberg.com/news/articles/2019-08-22/why-uber-drivers-are-fighting-for-their-data>.

27. Natasha Lomas, "UK Uber Drivers Are Taking the Algorithm to Court," TechCrunch. 20 August 2020. <https://social.techcrunch.com/2020/07/20/uk-uber-drivers-are-taking-its-algorithm-to-court/>.

28. Shirin Ghaffary, "New York City Has Set the Nation's First Minimum Pay Rate for Uber and Lyft Drivers," Vox. 4 December 2018. <https://www.vox.com/2018/12/4/18125789/uber-lyft-drivers-wage-minimum-new-york>.

29. James A. Parrott and Michael Reich, "An Earnings Standard for New York City's App-Based Drivers: Economic Analysis and Policy Assessment," Report for the New York City Taxi and Limousine Commission (Institute for the Research on Labor and Employment, 2 July 2018). <https://irle.berkeley.edu/an-earnings-standard-for-new-york-citys-app-based-drivers/>.

the per-trip pay floor.³⁰ Instead of seeking transparency with respect to pricing algorithms, which is a reactive effort bound to play catch-up with platforms' dynamic operational strategies, the City of New York thus took control by implementing a minimum wage rule that limited the price-setting power of ride-hailing firms: when drivers make less than US\$17.22 an hour after expenses, these firms are required to pay up.

In response to these measures, however, Uber and Lyft promptly started limiting drivers' access to their platforms during times of lower demand, introducing tiered quota systems and work scheduling schemes that prioritised drivers who were able to complete exceedingly difficult to reach trip targets while also maintaining a near-perfect rating. This so-called 'lockout' has had a severely detrimental impact on NYC's ride-hail drivers, who either had to be working constantly in order to maintain their spot in the top tier or had to wait around (and sometimes sleep) in their car to be available when a potentially lucrative slot opened up.³¹

Whereas the new regulations were intended to limit drivers' idle time and increase their wages, Uber and Lyft's counter-strategies thus resulted in the exact opposite and rendered ride-hail driving even more precarious. What I find striking here is how these regulatory measures made both firms act more like regular low-wage employers than ever before, resorting to automated work scheduling and segmentation techniques that are so common in service industries where margins are thin and companies are continually looking to minimize labour costs.³² Ominously, it also tells us something about how these companies are likely to respond if they would be classified as such.

As the Covid-19 pandemic hit New York and the demand for ride-hailing services tanked, Uber decided to temporarily lift its restrictions.³³ While this move was ostensibly intended to help drivers during the city-wide lockdown, it has also enabled a situation where driver supply can (again) vastly outnumber customer demand. This would inevitably have a negative impact on the company's utilisation rate, meaning it has to pay out more per trip to meet the minimum wage regulations. Now that a public health crisis has collapsed the market, however, Uber seems to be less worried about these expenses. After all, the lockdown essentially produces the same outcome as its lockout: fewer drivers are active on its platform.

Or perhaps it is just even less concerned with playing by the rules. Even before the pandemic, drivers and labour advocates expressed their dismay at how the TLC was failing to properly enforce its own regulations and had started changing its language from 'minimum pay per hour' to 'average pay per hour,' thereby

30. Edward Jr. Ongweso, "The Lockout: Why Uber Drivers in NYC Are Sleeping in Their Cars," Vice, 19 March 2020. https://www.vice.com/en_us/article/pkewqb/the-lockout-why-uber-drivers-in-nyc-are-sleeping-in-their-cars.

31. Ibid.

32. Alex J. Wood, "Powerful Times: Flexible Discipline and Schedule Gifts at Work," *Work, Employment and Society* 32, no. 6 (2018): 1061-77.

33. Andrew J. Hawkins, "Uber Is Lifting Restrictions on Drivers in NYC in Response to Coronavirus," *The Verge*, 19 March 2020, <https://www.theverge.com/2020/3/19/21187261/uber-lift-restrictions-driver-app-nyc-coronavirus>.

relinquishing the universal wage floor.³⁴ While the pandemic has rightfully shifted public attention to how ride-hailing and delivery companies are inadequately protecting workers' health and safety, it also appears to have further weakened the city's commitment to minimum wage enforcement.³⁵ Consequently, drivers who see themselves forced to stay logged on are reporting sharp income drops and can barely survive,³⁶ especially as Uber and Lyft are delaying access to the State of New York's unemployment insurance.³⁷

Proper regulatory enforcement would ameliorate this situation, especially for high-volume drivers, yet it would undoubtedly also result in new restrictions. The reason why so many drivers can continue to work on these platforms at a time when masses of low-wage workers are being laid off or furloughed is precisely because gig economy companies continue to find ways to evade labour laws, including minimum wage regulations. As such, drivers cannot make a living with Uber during the pandemic, yet they cannot really do without the app either. I address this conundrum in the final section below.

34. Peter Rugh, "Uber Exploited, Lyfted Down: How Ride-Share Companies Cheat Drivers Out of Minimum Wages," *The IndyPendent*. 6 October 2019. <https://indypendent.org/2019/10/uber-exploited-lyfted-down-how-ride-share-companies-cheat-drivers-out-of-minimum-wages/>; Ongweso, "The Lock-out."

35. For example, see Dara Kerr, "Uber Hears Drivers' Demands, Ships out Masks for Coronavirus Protection," *CNET*. 9 April 2020. <https://www.cnet.com/news/uber-hears-drivers-demands-ships-out-masks-for-coronavirus-protection/>.

36. Aziz Bah, "I'm a New York City Uber Driver. The Pandemic Shows That My Industry Needs Fundamental Change or Drivers Will Never Recover," *Business Insider*. 29 July 2020. <https://www.businessinsider.com/uber-lyft-drivers-covid-19-pandemic-virus-economy-right-bargain-2020-7>.

37. Noam Scheiber, "Drivers Say Uber and Lyft Are Blocking Unemployment Pay," *The New York Times*. 24 March 2020. <https://www.nytimes.com/2020/03/24/business/economy/coronavirus-uber-lyft-drivers-unemployment.html>.

Policy Recommendations

The reason I have been dwelling on the fate of Uber drivers in New York City is because it presents a unique case study of the ongoing struggle to abolish the wage as a wager. In conclusion, three policy recommendations can be derived from this case:

Policy Recommendation 1: Gig economy companies should be statutorily obliged to share their data with city authorities.

Obtaining relevant and comprehensive data from gig economy companies is a critical base requirement for achieving meaningful regulatory change. The unique data sharing arrangement between the TLC and New York-based ride-hailing platforms enabled Parrot and Reich to calculate existing hourly wages after expenses and recommend a new minimum wage for app-based drivers.³⁸ Their study thereby effectively side-stepped the wage obfuscation introduced by dynamic pricing algorithms and the gamification of payouts.

Policy Recommendation 2: City authorities should strengthen their enforcement capacities to ensure gig economy companies adhere to new regulatory frameworks.

Policymakers should not only work toward establishing minimum wage requirements; they should also increase their commitment to regulatory enforcement once these requirements are in place, especially now that the Covid-19 pandemic is plunging national economies into a major recession. As platform companies are attempting to leverage this crisis by courting local governments, emphasising corporate social responsibility and reformulating their value proposition for cities,³⁹ it is important not to surrender the political will to maintain the rules, norms, and standards that protect workers. This includes not replacing universal wage floors with average wage objectives, however determined, given that such averages do not accurately represent 'large deviations in the income distribution of drivers.'⁴⁰

38. In contrast, the city of Seattle could not establish such an arrangement with Uber and Lyft as it explored the implementation of a minimum wage. Instead, it commissioned Parrot and Reich to conduct their own survey in order to calculate how much drivers were making. Yet shortly before this study could be sent to the city, a research team from Cornell's ILR School submitted their alternative report - commissioned by Uber and based on exclusive access to the company's data (Kerr 2020). Beyond the ensuing controversy over diverging results and methods, this incident shows the ethical and political importance of ensuring open access to data that may be proprietary but is in the public interest. As an open letter denouncing the Cornell/Uber study (signed by this author) states: "The acceptance of the company's data and analytical parameters, especially when policymakers have commissioned a study on this very matter, normalises the company's systematic withholding of basic information needed by regulators to govern." For the open letter see: <https://medium.com/@gigeconomyresearchersunited/open-letter-and-principles-for-ethical-research-on-the-gig-economy-3cd27924cc08>.

39. Niels Van Doorn, Jelke Bosma, and Eva Mos, "Disrupting 'Business as Usual': COVID-19 and Platform Labour," *Futures of Work*. 13 July 2020. <https://futuresofwork.co.uk/2020/07/13/disrupting-business-as-usual-how-covid-19-is-impacting-platform-mediated-labour-and-social-reproduction/>.

40. Eszter Bokányi and Anikó Hannák, "Understanding Inequalities in Ride-Hailing Services Through Simulations," *Scientific Reports* 10, no. 1 (2020): 1; See also Louis Hyman et al., "Platform Driving In Seattle" (Ithaca, NY: Cornell University, ILR School, Institute for Workplace Studies, 6 July 2020).

There is no 'average driver.' Instead, all drivers should earn at least the local minimum wage. In countries where local jurisdictions cannot set wage floors autonomously, policymakers should endeavour to include gig workers in national or state-wide minimum wage legislation.

Policy Recommendation 3: National legislation should be passed to ensure a comprehensive system of labour rights and protections for all gig workers.

This could be achieved by reclassifying gig workers as employees, which would not only guarantee that all gig workers have the right to a minimum wage, regardless of where they work, but would also grant them additional rights and insurances they are currently missing (e.g. the right to collective bargaining and sick pay). The tide seems to be turning, as more courts and legislators are deciding that platform companies should treat their workforce as employees.⁴¹ Yet we should also anticipate how these firms will react to reclassification efforts. They will not only fight court decisions and ignore new laws, as they have done in California,⁴² but will also limit gig workers' access to their platforms, as in New York, or ultimately withdraw from a city or country altogether - as Deliveroo did in Germany.⁴³ To shrug or celebrate and say 'good riddance' is to ignore the elephant in the room; namely the reason why so many workers, predominantly immigrants and minorities, continue to seek out and rely on app-based gig work.⁴⁴ This is not an argument against reclassification *per se*, but rather a warning that it is not a solution in and by itself. We need more ambitious and truly comprehensive approaches that overcome the shortcomings of existing employment law.

Make no mistake, there are no easy fixes here. Beyond concrete policy recommendations, even beyond the realm of policy proper, what is required is the political vision and will to achieve more radical forms of redistributive social justice. Ultimately, then, my most urgent and far-reaching recommendation is to raise wages and improve working conditions across low-wage industries, so that workers have real alternatives and do not have to accept the ever-changing rules of the games gig economy companies play - with their wages and access to the app. Until this happens, Uber and its ilk will continue to attract mostly racialised labour market outsiders and will be able to leverage the plight of these precarious workers to justify their operations and resist regulation (as Uber has done in response to the revocation of its operating license in London). Moreover, to truly abolish the wage as a wager, the decommodification of labour needs to extend beyond the gig economy and involve stronger interventions in welfare and immigration regulation to ensure a robust defence of workers' rights. Only a policy and political agenda geared toward the emancipation of the most vulnerable and dispossessed can keep workers in need from taking a chance on predatory platforms.

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