Subsidising Billionaires

Simulating the Net Incomes of UberX Drivers in Australia

By Jim Stanford, Ph.D.
Centre for Future Work at the Australia Institute

March 2018
About The Australia Institute

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. We barrack for ideas, not political parties or candidates. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

Our Philosophy

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute’s directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

Our Purpose – ‘Research That Matters’

The Institute publishes research that contributes to a more just, sustainable and peaceful society. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. Donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at https://www.tai.org.au or by calling the Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

Level 1, Endeavour House, 1 Franklin St
Canberra, ACT 2601
Tel: (02) 61300530
Email: mail@tai.org.au
Website: www.tai.org.au

About the Centre for Future Work

The Centre for Future Work is a research centre, housed within the Australia Institute, to conduct and publish progressive economic research on work, employment, and labour markets. It serves as a unique centre of excellence on the economic issues facing working people: including the future of jobs, wages and income distribution, skills and training, sector and industry policies, globalisation, the role of government, public services, and more. The Centre also develops timely and practical policy proposals to help make the world of work better for working people and their families.

www.futurework.org.au

The author thanks without implication Michael Walker, Richard Dennis, David Richardson, Troy Henderson, and several UberX drivers (who do not wish to be named) for helpful input.
Table of Contents

Summary.................................................................................................................................................. 4
UberX Pricing and Market Strategy ........................................................................................................ 5
Simulating Uber Drivers’ Hourly Incomes .............................................................................................. 9
The Extent of Driver Underpayment .................................................................................................... 16
The Wage Subsidy Received by Uber .................................................................................................. 18
Sensitivity Analysis: Waiting Times and Vehicle Expenses ................................................................. 20
Other Aspects of Uber’s Labour Model ............................................................................................... 23
Uber Drivers and Taxi Drivers .............................................................................................................. 25
Driver Underpayment and Uber’s Financial Performance ................................................................. 27
Conclusion: Innovation versus Exploitation .......................................................................................... 30
Summary

This report estimates the net incomes of UberX drivers in six Australian cities, on the basis of public information regarding Uber’s pricing structure, a representative benchmark urban trip, and other parameters (including vehicle expense guidelines in Australia’s tax system). The main findings of these simulations include:

- UberX services are provided at significantly lower prices than traditional taxi services in all major Australian cities; on average, traditional taxis are about 40 percent more expensive than UberX, based on a representative benchmark trip.
- Under normal pricing schedules, it is very unlikely that UberX drivers earn net income (after all expenses) equivalent to Australia’s statutory minimum wages for workers in this industry.
- We estimate the net income of Uber drivers (on average across the six cities considered in the report) under plausible assumptions to be $14.62 per hour. The highest simulated net incomes are generated in Canberra and Sydney (over $18 per hour); the lowest are in Perth (under $11 per hour).
- The simulated average hourly net income for Uber drivers is well below Australia’s basic statutory minimum wage, of $18.29 per hour. And it equals less than half the statutory minimum payments required under the relevant Modern Award that would apply to waged workers in this sector (taking into account casual loading increments and penalty rates for evening and weekend work).

The implicit wage subsidy paid to Uber by its drivers, in the form of below-minimum-wage labour, is large relative to the overall fares and margins generated in this business. It is equivalent to a subsidy paid to Uber (and ultimately its owners) by its Australian drivers, that is worth hundreds of millions of dollars per year. And if UberX prices were increased enough to pay minimum statutory wages to its drivers, almost all of UberX’s price advantage relative to traditional taxis would disappear.

The report concludes that Australian lawmakers and regulators should urgently investigate the low net incomes received by UberX drivers (and other workers in the so-called “gig economy”), consider their relationship to normal minimum labour standards, and then develop effective regulatory responses to ensure these workers are afforded the same protections as other workers in Australia. In particular, regulators need to modernise and strengthen the definition of who constitutes an “employee” in Australian workplaces, to take account of the growth of irregular labour practices associated with digital business models.
UberX Pricing and Market Strategy

Uber’s market expansion strategy has relied in large part on an ambitious effort to undercut the prices charged by conventional taxis. Uber’s lower prices reduce the cost of traveling by taxi, and are a key reason the service has proven popular with many customers (along with the convenience which many customers enjoy with its on-line hailing app). On average, fares for typical journeys are about 40 percent higher in a conventional taxi than in an UberX vehicle. However, this aggressive pricing strategy reduces the revenue base from which to pay the workers who actually perform the service. Uber’s business model – in which its workers are artificially defined as independent businesses in their own right – helps to disguise the financial sacrifices that drivers make to allow this business model to work.

We have compared UberX and conventional taxi fares in six Australian capital cities, based on a typical “benchmark” urban trip: covering 10 km in distance, and taking 22 minutes (10 of which are spent waiting in traffic; when moving, the distance was covered at an average speed of 50 km/hr). The results of the comparison are summarised in Table 1.

The comparison relies on published fares for UberX under normal fare conditions, consisting of four components: a 55-cent booking fee, a pickup charge, and separate charges applied based on kilometres traveled and time elapsed during the fare. Uber fares can be more expensive at certain times, due to its “surge” or “dynamic” pricing system.\(^1\) Taxi fares are estimated on the basis of normal weekday regulated fares in each city (which also consist of a pickup charge,\(^2\) a flag fall charge, and amounts for distance traveled and time waiting in traffic\(^3\)). We do not include evening or weekend surcharges, or extra charges for payment with credit cards, which can make taxis even more expensive. Of course, the specific costs of Uber and conventional taxis will vary

---

\(^1\) The components of UberX’s fare structure are published on its fare estimator site, https://www.uber.com/en-AU/fare-estimate/. Under surge pricing, Uber’s normal fares can be multiplied by a scalar reflecting immediate consumer demand conditions, in which case driver incomes are also increased. However, Uber controls the implementation of surge pricing through its internal system algorithms, and drivers have no certainty or pre-knowledge about when that system would apply.

\(^2\) Taxis are somewhat cheaper when they are hailed directly on the street or from a taxi rank, in which case the pickup charge does not apply; this is not possible with UberX services, which must be dispatched through the central app. To facilitate a direct comparison between the two modes, we simulate taxi fares booked for pickup.

\(^3\) For taxis, the waiting charge applies only when the vehicle is stopped in traffic or traveling below a low speed threshold; for UberX, the time charge applies to the full period elapsed during the journey.
Table 1

Uber v. Taxi Fare Comparisons

<table>
<thead>
<tr>
<th>City</th>
<th>Sydney</th>
<th>Melbourne</th>
<th>Brisbane</th>
<th>Perth</th>
<th>Adelaide</th>
<th>Canberra</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UberX</td>
<td>Taxi</td>
<td>UberX</td>
<td>Taxi</td>
<td>UberX</td>
<td>Taxi</td>
</tr>
<tr>
<td>Call out/booking</td>
<td>$0.55</td>
<td>$2.50$^1</td>
<td>$0.55</td>
<td>$2.00</td>
<td>$0.55</td>
<td>$1.50$^1</td>
</tr>
<tr>
<td>Flag fall</td>
<td>$3.50$^2</td>
<td>$4.60$^2</td>
<td>$3.00$^2</td>
<td>$5.20$^2</td>
<td>$2.50</td>
<td>$2.90</td>
</tr>
<tr>
<td>Per km</td>
<td>$1.45</td>
<td>$2.19</td>
<td>$1.15</td>
<td>$1.62</td>
<td>$1.15</td>
<td>$2.17</td>
</tr>
<tr>
<td>Per Minute</td>
<td>$0.40</td>
<td>$0.94</td>
<td>$0.35</td>
<td>$0.57</td>
<td>$0.38</td>
<td>$0.82</td>
</tr>
<tr>
<td>Total</td>
<td>$27.35</td>
<td>$38.44</td>
<td>$22.75</td>
<td>$29.10</td>
<td>$22.91</td>
<td>$34.08</td>
</tr>
<tr>
<td>Taxi Premium</td>
<td>40.5%</td>
<td>27.9%</td>
<td>48.8%</td>
<td>58.6%</td>
<td>39.5%</td>
<td>30.3%</td>
</tr>
</tbody>
</table>

Source: Author's calculations as described in text. Based on representative urban fare of 10 km taking 22 minutes. Taxi cost excludes night or weekend surcharges; all costs exclude airport fees, tolls, or other charges.
1. Representative booking fee (not regulated).
2. Includes levy for taxi license compensation.
with different rides at different times, but this simulation is an illustrative comparison of the core benchmark pricing of the two modes, for a standard dispatched drive during weekday hours.

On average across the six capital cities, our comparison indicates that taxis cost about 40 percent more than equivalent fares on UberX. The smallest price disadvantage of conventional taxis is found in Melbourne (28 percent); the largest is in Perth (over 50 percent). This finding is consistent with other published comparisons of Uber fares with conventional taxis, which have similarly estimated that conventional taxis cost 30 to 75 percent more than UberX.4

It is interesting to note that the inter-city variation in Uber’s pricing model largely mirrors inter-city differences in regulated taxi rates. This is consistent with the conclusion that UberX has established its fares with a goal of undercutting conventional taxi fares by a significant target margin in each local market. For example, among the lowest UberX fares are found in Melbourne – even though that is one of Australia’s most expensive cities in which to work and live. But regulated taxi fares are also relatively low in Melbourne, and this has likely motivated Uber to set its own prices even more aggressively. Conversely, UberX prices are highest in Sydney, which also demonstrates the highest taxi fares; UberX fares are also relatively high in Canberra, another city with relatively high taxi fares.

How can Uber afford to provide its services at a significantly lower price than conventional taxi services? The technology of actually producing the service is identical in the two businesses: both Uber and taxis rely on a driver operating a passenger vehicle, picking up a customer and delivering them to their destination. But the organisation and employment relationships embedded within Uber’s business model, including how it hires, dispatches, supervises, and compensates those performing the work, is crucial in creating the economic space for Uber to reduce

---

prices well below those of conventional taxis.\textsuperscript{5} As we will see, UberX’s price advantage depends centrally on its ability to compensate its workers at levels well below statutory minimum wages that would apply to this work if paid in the context of a waged employment relationship.

\textsuperscript{5} There are other sources of potential cost savings contributing to Uber’s aggressive pricing strategy, including its success in avoiding many of the costs associated with traditional taxis, including registration, medallion, and license fees.
Simulating Uber Drivers’ Hourly Incomes

The relatively low prices charged for Uber rides (relative to taxis) effectively cap the total revenue from which workers’ incomes can be paid. But it gets worse for the drivers, because Uber captures a significant share of that gross revenue in the form of various fees, and then requires its drivers to pay for numerous other expenses associated with the operation of the service. The net income of Uber drivers, therefore, constitutes a surprisingly small share of the total revenues paid by Uber passengers.

It is especially important to take account of the costs of purchasing or leasing and operating the vehicle. Many individuals (including prospective Uber drivers) may be tempted to ignore these costs on the assumption that the driver owns a car anyway – in which case the “extra cost” of using it to drive Uber may not be fully visible. This assumption is not accurate, of course: even if the use of a car is shared between personal and Uber use, the provision of Uber services clearly attracts additional costs (including variable costs such as petrol and extra maintenance, and a proportionate share of fixed vehicle costs such as depreciation) which clearly affect the drivers’ net compensation. Uber drivers are responsible for all vehicle-related costs, including depreciation or leasing costs; interest costs; petrol; maintenance expenses; cleaning; insurance; and licenses, registration fees and taxes. A properly-costed business operation cannot run for long on unacknowledged donations of capital equipment and operating costs from its workers. Uber drivers are also responsible for forwarding net GST charged on the full amount collected from the passenger.6

Uber’s present revenue model in Australia gives it a 55-cent booking fee plus 27.5 percent of additional gross revenues collected on each fare.7 Uber’s fees are deducted from the revenue Uber collects through its digital app; the remaining 72.5 percent

---

6 The GST forwarded by drivers is net of credits for GST paid by the drivers on purchases of inputs and on its payments to Uber.

7 Uber has increased its take of gross revenues several times in recent years. Until April 2016, Australian drivers kept 80 percent of gross revenue. For Uber drivers who started with the company before that date, the company grandfathered their previous rate (though it was not contractually required to do so). Drivers starting after April 2016 initially kept only 75 percent of gross revenue. That share was reduced further effective December 2017, in conjunction with a change in how Uber commissions are treated under Australia’s GST system. Drivers now keep 72.5 percent of gross (except drivers who started before April 2016, who keep 78 percent).
share is forwarded to drivers at the end of each week (or more frequently if desired). Out of that share, drivers must cover all petrol, operating, and capital costs associated with the vehicle, as well as net GST payments. They are not paid for the time it takes to drive to collect the fare (at the location specified by the customer), for time spent waiting between fares, or for time taken to drive to and from the region they are servicing at the beginning and end of their work days.

We simulate the net hourly wage received by Uber drivers, on the basis of Uber’s revenue model and the benchmark fare described above, with the following assumptions:

- We assume the driver must travel 1 kilometer to pick up the fare. We assume this takes 2 minutes.

- The gross revenue from the fare, and the time taken to complete the fare (22 minutes, plus 2 more minutes to collect the passenger), are as specified in Table 1 above.

- Uber’s fees (55 cent booking fee plus 27.5 percent of the gross fare excluding that 55 cents) are deducted from gross revenue.

- The driver’s net GST payments are assumed to equal 10 percent of the difference between the gross revenue and the driver’s GST-taxable expenses (for vehicle operations, described below, and Uber’s fees).

- In some cities, the driver also collects and forwards a new per-fare levy (usually $1) imposed by state governments to finance new schemes for compensation of taxi license holders (whose investments have depreciated dramatically in the wake of the entry of Uber and similar businesses to the industry). These levies are also deducted from gross income.

- Vehicle depreciation, operating and petrol costs are assumed to be determined in line with Australian Tax Office guidelines regarding allowable vehicle expenses. For the 2016-17 tax year, that benchmark was 66 cents per operating kilometer. That amount is defined on the basis of detailed ATO

---

8 Uber does not allow cash payments for its rides in Australia, in order to control the flow and division of revenues.

modeling of vehicle ownership and depreciation costs; petrol costs; maintenance and tyres; registration and vehicle taxes; insurance; and other operating expenses. The ATO figure reflects a combination of urban and intercity applications; actual operating expenses for point-to-point transportation services in an urban area (which experience lower fuel efficiency, higher insurance costs, and greater wear-and-tear) could well be higher.\(^{10}\) We have not included additional non-vehicle costs incurred by UberX drivers – such as phone and internet charges, and costs for passenger amenities (such as bottled water, snacks, etc.), which are commonly offered in hopes of boosting a driver’s on-line customer satisfaction ratings.\(^{11}\)

- We assume that after completing the fare, the driver waits an average of 10 minutes before being assigned to the next fare. Anecdotal evidence from drivers suggests that this often underestimates waiting times for fares; unpaid waits are often longer in slow-traffic times and neighbourhoods. During busy peak periods or in high-traffic neighbourhoods, in contrast, average wait times may be lower.\(^{12}\)

As summarised in Table 2, after deducting Uber fees, GST and other government payments, and vehicle operating costs, the driver is left with a relatively small portion of the total revenue generated by the fare: slightly over one-third (34.8%) on average across the six cities surveyed.

This net revenue can be converted into an hourly net income, on the basis of assumed unpaid waiting time before the driver is assigned to another fare, and unpaid time required to fetch the next passenger.\(^{13}\) Simulated hourly net incomes range from below $11 in Perth (where Uber rates are lowest), to between $18 and $19 in Sydney and Canberra (the cities with the highest Uber fares). On average across the six cities simulated, net hourly income received by the drivers is just $14.62 (see Figure 1). Many drivers will be earning even less than this per hour.

\(^{10}\) We explore the sensitivity of simulated net incomes to variation in assumed vehicle expenses below.

\(^{11}\) Uber drivers can be discharged by the company on the basis of below-minimum customer service ratings collected through the on-line app; Uber therefore encourages drivers to provide amenities such as bottled water as a way of boosting those ratings (https://newsroom.uber.com/australia/respect-is-a-two-way-street/).

\(^{12}\) We explore the sensitivity of net incomes to wait times and other key assumptions in the later section.

\(^{13}\) This income is stated before considering payments of drivers’ personal income tax.
### Table 2
**UberX Driver Simulated Net Incomes**

<table>
<thead>
<tr>
<th>City</th>
<th>Sydney</th>
<th>% of total</th>
<th>Melbourne</th>
<th>% of total</th>
<th>Brisbane</th>
<th>% of total</th>
<th>Perth</th>
<th>% of total</th>
<th>Adelaide</th>
<th>% of total</th>
<th>Canberra</th>
<th>% of total</th>
<th>Average</th>
<th>$/%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$/%</td>
<td></td>
</tr>
<tr>
<td>Gross Fare</td>
<td>$27.35</td>
<td>$22.75</td>
<td>$22.91</td>
<td>$19.59</td>
<td>$22.55</td>
<td>$26.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Uber</td>
<td>$7.65</td>
<td>28.0%</td>
<td>$6.38</td>
<td>28.0%</td>
<td>$6.42</td>
<td>28.0%</td>
<td>$5.51</td>
<td>28.1%</td>
<td>$6.33</td>
<td>28.0%</td>
<td>$7.36</td>
<td>28.0%</td>
<td>28.0%</td>
<td></td>
</tr>
<tr>
<td>To Government(^1)</td>
<td>$2.14</td>
<td>7.8%</td>
<td>$1.81</td>
<td>8.0%</td>
<td>$0.92</td>
<td>4.0%</td>
<td>$0.68</td>
<td>3.5%</td>
<td>$1.80</td>
<td>8.0%</td>
<td>$1.17</td>
<td>4.4%</td>
<td>6.0%</td>
<td></td>
</tr>
<tr>
<td>Petrol/Vehicle Expenses</td>
<td>$7.26</td>
<td>26.5%</td>
<td>$7.26</td>
<td>31.9%</td>
<td>$7.26</td>
<td>31.7%</td>
<td>$7.26</td>
<td>37.1%</td>
<td>$7.26</td>
<td>32.2%</td>
<td>$7.26</td>
<td>27.6%</td>
<td>31.2%</td>
<td></td>
</tr>
<tr>
<td>Net to Driver (Before Inc.Tax)</td>
<td>$10.30</td>
<td>37.7%</td>
<td>$7.30</td>
<td>32.1%</td>
<td>$8.30</td>
<td>36.2%</td>
<td>$6.14</td>
<td>31.3%</td>
<td>$7.17</td>
<td>31.8%</td>
<td>$10.52</td>
<td>40.0%</td>
<td>34.8%</td>
<td></td>
</tr>
<tr>
<td>Time Spent (min)</td>
<td>34</td>
<td></td>
<td>34</td>
<td></td>
<td>34</td>
<td></td>
<td>34</td>
<td></td>
<td>34</td>
<td></td>
<td>34</td>
<td></td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Hourly Wage</td>
<td>$18.18</td>
<td></td>
<td>$12.88</td>
<td></td>
<td>$14.65</td>
<td></td>
<td>$10.83</td>
<td></td>
<td>$12.65</td>
<td></td>
<td>$18.56</td>
<td></td>
<td>$14.62</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on assumptions described in text.

1. Includes driver’s net GST payments (less GST credits on input purchases) and taxi compensation levy only; does not include personal income tax, petrol taxes, or GST paid directly by Uber and input providers.
Figure 1
Simulated UberX Net Hourly Incomes by City

Figure 2
Allocation of Gross Revenues

Source: Author’s calculations as described in text.
The allocation of total fare revenue between the major stakeholders in Uber’s business is summarised in Figure 2, based on the six-city average. Uber itself receives 28 percent of the total revenue from the fare (based on the 55-cent booking fee and its 27.5 percent commission). This is an impressive share, considering that it neither supplied the direct labour required to produce the service, nor the direct capital equipment (vehicles) involved in that production.\textsuperscript{14} The government collects about 6 percent of the fare in net GST paid by the drivers and (in some cities) the point-to-point levy.\textsuperscript{15} Vehicle operating expenses claim just under one-third of the total value of the fare. The driver is left with the remainder: 34.8 percent of gross revenue, on average across the six cities.

Other published estimates of the net income received by Uber drivers indicate that, if anything, these simulations are likely optimistic. Other studies have estimated net income of $10-15 per hour after costs.\textsuperscript{16}

Driver incomes can be higher if Uber’s “surge” pricing system is in effect, in which case fares are increased by a factor which purportedly reflects momentary imbalances between driver supply and customer demand. However, this “surge” income cannot be relied on, since drivers have no control or knowledge when (or even if) this system will be activated. Moreover, as Uber drivers increasingly organise their work schedules around peak periods, and as the general population of drivers increases, then the likelihood that demand for drivers will exceed supply (hence triggering surge pricing) is further reduced. Indeed, almost by definition, surge pricing cannot be a regular source of income for most drivers, since the system only kicks into effect when the network

\textsuperscript{14} Uber’s claim to this share of revenue is based on its ownership of the ride-hailing app (which is necessary for drivers to connect with the customers), and its expenses for marketing, administration, and other corporate-level overhead.

\textsuperscript{15} This 6 percent estimated share does not including vehicle and registration taxes and fees; taxes on petrol; net GST paid by the businesses which are paid by the driver (including the Uber commission); and personal income taxes that would be ultimately paid by the driver.

experiences a shortage of working drivers (relative to the level of consumer demand) – and hence there must be a limited number of drivers on the job. News reports, and anecdotal evidence from drivers, indicates that supplemental income from surge pricing is shrinking as a result of the growing supply of Uber drivers – many of whom concentrate their working hours in peak periods in often-unfulfilled hope of attracting surge price revenue. Even Uber management acknowledges that its goal is to reduce or eliminate surge pricing: as Daniel Graf, Uber’s vice president of product, recently stated, “For us, it’s better not to surge. If we don’t surge, we can produce more rides.”

---

17 In the preceding simulations, it would require a very strong surge factor (equal to 2.0) for drivers just to meet the weighted average wage minimums specified in the relevant industry award, as discussed further below.

The Extent of Driver Underpayment

The simulated average net income for UberX drivers across the six cities considered is just $14.62 per hour. That is $3.67 per hour (or 20 percent) below the current national minimum wage in Australia. However, the gap between Uber incomes and minimum labour standards is actually much larger than this, once adjustments are made to reflect casual loading (for workers, like Uber drivers, who do not receive regular leave entitlements and other normal employment benefits), penalty rates for working on evenings, weekends, and holidays (the busiest times for Uber drivers), and other minimum standards specified in Australian labour laws.

Waged drivers in the passenger transportation industry in Australia must be paid at least in accordance with the minimum terms specified in the relevant industry Modern Award. This is award #MA00063, the “Passenger Vehicle Transportation Award.”

This award provides for minimum hourly wages that vary according to the day, or time of day, the work is performed (with wage penalties incorporated for work on weekends, evenings, and holidays). Given the unsociable hours typically worked by drivers, these variable rates are important. For workers hired on a casual basis, minimum award wages also incorporate a 25 percent casual loading deemed to reflect the value of foregone entitlements, such as paid holidays, sick pay, and others. We use the casual-loaded minimum wage as our benchmark of statutory minimum wages, in recognition of the irregular hours typically worked by Uber drivers. An alternative would be to utilise minimum wages for permanent workers, and then adjust them upward to reflect statutory minimum payments for superannuation, sick pay, annual leave, and other basic entitlements; this approach would not significantly affect the comparison between Uber net incomes and statutory minimums (since the rationale for the 25 percent casual loading is intended to reflect the value of statutory entitlements which casual workers forego).

Table 3 lists the minimum casual-loaded hourly wage rates for entry-level passenger drivers for various times of the week as specified in the award. For the lowest wage classification, for regular weekday work, the minimum hourly wage is $24.66; rates are

---

19 Details of this award are available at the Fair Work Commission, [https://www.fwc.gov.au/documents/modern_awards/award/ma000063/default.htm](https://www.fwc.gov.au/documents/modern_awards/award/ma000063/default.htm). Its scope includes waged drivers of motor vehicles, limousines, and hire cars, as well as other classifications of passenger vehicle operation; it does not cover most taxi drivers, who are defined as “bailees” under current Australian law.
higher for evening, weekend, and holiday work. A weighted-average overall minimum is then calculated on the basis of an assumed driving schedule that is “typical” for a point-to-point passenger driver: working 3 pm to 11 pm 4 weekdays per week, plus one 8-hour day per weekend (alternating Saturdays and Sundays) and 10 public holidays per year. This schedule translates into an average weighted minimum award wage of just over $30 per hour (including casual loading).

Table 3

<table>
<thead>
<tr>
<th>Award Minimum (Casual)</th>
<th>Wage</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>$24.66</td>
<td>0.377</td>
</tr>
<tr>
<td>Nights</td>
<td>$27.62</td>
<td>0.377</td>
</tr>
<tr>
<td>Saturday</td>
<td>$34.53</td>
<td>0.100</td>
</tr>
<tr>
<td>Sunday</td>
<td>$44.39</td>
<td>0.100</td>
</tr>
<tr>
<td>Public Holiday</td>
<td>$54.26</td>
<td>0.046</td>
</tr>
<tr>
<td><strong>Weighted Average</strong></td>
<td><strong>$30.10</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculations from Fair Work Commission.

This weighted average minimum wage, based on the Modern Awards system, is more than twice as high as the estimated hourly net income received by UberX drivers under the preceding simulation. By this benchmark, UberX drivers are underpaid by $15.50 per hour. Over a year’s work for a full-time driver, this translates into an aggregate annual underpayment of over $30,000 per year.

---

20 For workers who were employed mainly on evenings or weekends, as is often the case in this industry, the weighted-average hourly minimum wage would be even higher.
The Wage Subsidy Received by Uber

Another way of understanding the artificially low incomes paid to Uber drivers, is to view their underpayment as a form of subsidy to the business they work for. This subsidy is extracted from drivers, perhaps unwittingly and unwillingly, and is crucial to the company’s aggressive growth strategy (which has relied on a fare structure which undercuts established taxi providers). It turns out, in fact, that the subsidy provided to Uber by its drivers is a crucial component of Uber’s pricing advantage over its traditional rivals.

If Uber drivers were paid according to the weighted average award minimum hourly wage rate, their net income received (after all operating costs and fees) for the benchmark fare simulated above would have to increase by $8.77 – to a total net income of $17.06. That $8.77 represents the value of the subsidy which drivers effectively transfer to Uber on that benchmark fare through their provision of labour at rates below normal minimum standards (see Table 4).

It is interesting to note that the wage subsidy accounts for more than the total gross revenue received by Uber from the average benchmark fare (which was $6.61). In other words, if Uber’s drivers were paid according to statutory minimums (while maintaining the current fare structure), the company would receive no net revenue at all from the fare.
Put differently, in order to pay Uber’s drivers according to the statutory minimum wage, but at the same time preserve Uber’s margin, the total fare for the benchmark ride described above would have to increase by 37 percent (to a six-city average total of over $32). That would wipe out most of the cost advantage which Uber’s current fare structure has provided it relative to traditional taxi operations. In other words, the effective subsidy which Uber drivers provide to the company through their provision of below-award wage rates accounts for almost all of the lower prices which Uber typically charges for its service.

On an aggregate basis, the cumulative value of the subsidy paid to Uber by its Australian drivers (through their below-minimum-wage incomes) amounts to hundreds of millions of dollars per year. Roy Morgan Research estimates that Australians take almost 4 million Uber rides per month, or over 45 million per year.21 Even an average per fare wage subsidy half as large as that estimated in Table 4 above,22 would produce a combined aggregate subsidy for Uber of approximately $200 million per year from its Australian drivers.

---


22 The per-fare wage subsidy depends on the length and time of the actual fares driven, many of which will be shorter and hence less expensive than the benchmark fare simulated above.
Sensitivity Analysis: Waiting Times and Vehicle Expenses

The preceding simulations of UberX drivers’ net income are necessarily based on key assumptions regarding input parameters; end results will vary with changes in those input parameters. This section tests the simulations for their sensitivity to changes in two of the most important assumptions: how long the driver typically waits before being assigned to another fare, and the actual expenses incurred for operating their vehicle.

Figure 3
Sensitivity of Net Incomes to Waiting Times

![Graph showing sensitivity of net incomes to waiting times](Image)

Source: Author’s calculations as described in text.

Figure 3 illustrates how estimated hourly net income (utilising the six-city average) is related negatively to waiting times between fares. The base model assumed an average 10-minute wait between fares. If the wait is longer (as is often the case at less busy times, or in lower-traffic regions), net hourly income declines notably. At an average wait of 20 minutes, the net hourly income falls by over $3 per hour (to about...
$11.30. At a 30-minute average wait, the hourly income declines further to $9.20. With a 40-minute average wait, it falls to below $8. The fact that Uber drivers are not paid for potentially long waiting periods, is key to the wage subsidy they effectively pay to their employer. On the other hand, when traffic is busy wait times can be shorter, and this boosts effective hourly incomes. If the wait is only 5 minutes between fares, the average net income rises to just over $17 per hour (still well below statutory minimums for this work). But even when there is no waiting time at all – so the driver receives a new fare immediately upon discharging their previous one, continually through their entire shift (a scenario which is never realised in practice) – the average effective hourly income would still only be about $20. That is still one-third below the weighted-average minimum rates specified in the relevant Modern Award.

Figure 4
Sensitivity of Net Incomes to Vehicle Expenses

![Bar chart showing sensitivity of net incomes to vehicle expenses](chart)

*Source: Author’s calculations as explained in text.*

A similar, although less dramatic, relationship is visible between assumed vehicle operating costs and net hourly incomes (illustrated in Figure 4). Our benchmark case was based on the ATO’s maximum operating cost guideline (including petrol) of 66 cents per kilometer. It is possible that actual operating costs would exceed that benchmark – especially in light of the extra costs associated with constant city driving. If operating costs were 20 percent higher than the ATO benchmark, the drivers’
effective hourly income falls by approximately $2.30, to around $12.30. On the other hand, if actual realised operating expenses were 20 percent below the ATO benchmark, the effective hourly rate grows by a similar margin, to about $16.90.

In the Uber business model, drivers are required to bear all of the cost, and all of the uncertainty, associated with operating their vehicles and serving passengers – even though many of those factors (ranging from petrol prices to waiting periods between fares) are beyond their control. This risk imposes considerable uncertainty on drivers’ incomes. And even under the most optimistic assumptions regarding wait times, operating expenses, and other key business parameters, drivers still do not earn net incomes equivalent to the minimum wages specified in the relevant industry award.

---

23 Remember, our analysis has not attempted to estimate non-vehicle operating costs, such as telephone and data charges, and various “amenities” provided to customers by drivers, so it is quite likely that the ATO benchmark underestimates true total costs incurred by drivers.
Other Aspects of Uber’s Labour Model

Uber’s aggressive pricing strategy, aimed at undercutting traditional taxi providers, has been facilitated by suppression of the incomes of its drivers to levels well below what would normally be required under Australian labour regulations. In addition to this underpayment of its drivers, there are other aspects of Uber’s labour model and practices that are also worthy of critical attention. These negative features include:

- Uber retains the right to change its contract with drivers (including adjusting its share of gross revenues) at any time. Apart from imposing substantial uncertainty on the incomes and conditions of its drivers (who must accept the new terms in order to keep driving for Uber), some legal experts have argued this provision may violate Schedule 2 of the Competition and Consumer Act regarding fair contracts.\(^{24}\)

- Uber monitors its drivers’ performance in part through on-line ratings provided by customers. Research has indicated that on-line systems of evaluating performance are not reliable indicators of true service quality, and are vulnerable to bias.\(^{25}\) Uber may discharge workers on the basis of negative customer reviews; this imposes a significant vulnerability on drivers, and does not meet normal due process in employee discipline. The pressure to maintain customer ratings also places Uber drivers in a subservient position relative to customers who may be harassing or abusive.

- Uber drivers’ personal cars do not normally possess specialised safety equipment (including always-on GPS locators, safety glass, and emergency beacons) regularly installed on taxis. Similarly, in the event of a crime or other


incident, active operational support for drivers from Uber’s largely automated dispatch system may be sub-optimal.

- Initially Uber did not limit the number of hours its drivers can work, opening the door to drivers working long hours that are unsafe – for themselves and their passengers. The temptation to work unduly long hours becomes the more pressing when drivers must cover the fixed costs of vehicle operation out of their revenues, when hourly net incomes are low, and when markets become over-supplied with drivers (meaning that drivers have to wait longer between fares, further reducing their hourly pay). The issue of overwork by Uber drivers was raised tragically by the case of an Uber passenger who was killed in Sydney after an unsafe drop-off by an Uber driver reported to have worked 21 consecutive hours.\(^{26}\) Uber has now reportedly begun to require drivers to log off for a minimum of 6 hours after any 12-hour shift;\(^ {27}\) even this limit, however, would still allow Uber drivers to work 18 hours out of 24, or as much as 114 hours in a week – much longer than workers in regulated transportation activities (such as buses, trucking, or railway services) are legally allowed to work.

- Uber does not cap the number of drivers it recruits: after all, there is virtually no cost to the company arising from an oversupply of drivers on the job at any time (since drivers are not paid for time spent waiting between fares). To the contrary, Uber benefits from excess supply of drivers, which translates into faster response times to dispatch requests. The tendency to excess supply that has always been typical in the taxi industry\(^ {28}\) has traditionally been managed through regulatory limits on the number of medallions or licenses issued in each region; Uber faces no such limit, and hence the cost of excess supply is borne fully by its drivers.\(^ {29}\)

---


\(^{28}\) Like any occupation with relatively low barriers to entry.

\(^{29}\) It is worth noting that a situation of significant and chronic excess supply of drivers, while benefiting Uber, represents a fundamental economic misallocation of resources: it is a deadweight economic loss for society to invest resources in cars and drivers that sit idle much of the day. This runs directly counter to the claim that Uber’s business model is fundamentally “efficient” in an economic sense.
Uber Drivers and Taxi Drivers

Uber’s market expansion strategy has taken direct aim at traditional taxis, wielding an aggressive pricing strategy that substantially undercuts regulated taxi fares. Uber’s successful growth (along with its imitators, like Lyft) has caused widespread displacement and job loss in the taxi industry, both for drivers and for the taxi owners that most work for.\(^{30}\) However, our analysis of the sub-minimum-wage net incomes received by Uber drivers should hardly be interpreted as a defense of practices in the conventional taxi industry – which is also rife with degraded low-paying work and widespread violation of labour norms.

Historically, governments have regulated the taxi industry, for various reasons: including regulating fares (to ensure transparency, prevent gouging, and ensure that fares are sufficient to sustainably cover reasonable costs); limiting the supply of taxis (so that incomes and standards are not unduly harmed by excess competition); setting standards for safety, quality and cleanliness of vehicles; setting standards for drivers (including minimum training and certification); and collecting taxes (in the form of license fees or other levies) to pay for administration and regulation. In some cases those regulations have had unintended consequences. The most obvious of those was the creation of an inflated value on taxi licenses and medallions, which came to reflect the excess “rents” that could be captured by their owners from the restriction of supply on the number of taxi services.\(^{31}\) Owners of medallions, along with taxi drivers, have opposed what they see as the preferential fiscal and regulatory treatment afforded to Uber and similar firms. Some states have now implemented policies to partially compensate taxi owners for capital losses resulting from the introduction (and after-the-fact legalisation) of services such as Uber; taxi drivers, however, do not receive such compensation.

Inadequate enforcement of regulations regarding vehicle quality, the training and certification of drivers, and other standards also undermined consumer confidence in the taxi industry – and contributed to consumer interest in Uber and similar services. Taxi drivers are badly exploited by license owners and taxi fleet companies, although

---

\(^{30}\) Some taxi drivers, if they own the required licenses or medallion and their own car, work for themselves; but most work for a separate owner or taxi company.

\(^{31}\) If licenses were non-transferrable and endowed with producers rather than owners, this problem of capitalised rents could be avoided while still accomplishing the goal of regulating the total supply to the industry. In some jurisdictions, traditional limits on entry to the taxi industry have been eliminated (largely in response to the growth of Uber and similar businesses), and this has exacerbated the general oversupply of point-to-point services.
regulatory provisions provide somewhat more certainty and protection than is the case for Uber drivers, and taxi drivers can join unions. In New South Wales taxi drivers are even protected by a state award that limits how much drivers must pay to their employer, provides access to annual leave and sick leave, and incorporates an implicit minimum hourly wage of over $20. Nevertheless, in the revenue-sharing system used by most taxi firms, owners typically have the upper hand (thanks to an ongoing supply of desperate people who are willing to drive taxi because they cannot find alternative work), and effective net incomes for taxi drivers may also fall below normal minimum wage benchmarks.

The taxi industry’s practices, therefore, are hardly a model of ethical treatment. But advocates and trade unions have campaigned over time to try to lift standards and achieve fairer treatment for drivers (through minimum labour standards, fare regulations that are supposed to guarantee minimum incomes for drivers, innovative measures such as the NSW model, and union campaigns). Obviously, this task becomes much harder when the whole industry is undercut by a new competitor charging much lower prices, paying its workers well below minimum wages with impunity, and increasing the supply of drivers without limit. Driving taxi has always been a gritty, challenging, low-paid, and often dangerous occupation. But there is no doubt that the competitive pressures unleashed by the entry of Uber and similar firms, with their capacity to avoid normal labour standards and recruit workers for sub-minimum-wage incomes, has made things worse. And the effective transfer of wealth from Uber drivers to the company’s owners (some of whom are billionaires) that is facilitated by these practices, is an especially galling distributional outcome.

Ironically, despite the substantial subsidies it receives via the sub-minimum-wage incomes paid to its drivers, Uber is still a money-losing operation. As a privately-held firm, Uber does not disclose its full financial statements (as would a publicly-traded enterprise). However, selected details have been disclosed by the company to financial journalists.\textsuperscript{34}

The company has generated strong revenue growth thanks to its aggressive market expansion. Total worldwide gross booking revenues (including the amounts paid back to drivers) rose to $37 billion (U.S.) in 2017, up 85 percent billion from the previous year. Net revenues (after deducting the drivers’ shares) were about $7.5 billion. That was not enough, however, to stem Uber’s losses, which reached a record $4.5 billion for the year.\textsuperscript{35} Since its formation, reports indicate that Uber has lost a cumulative total of over $12 billion.

Uber may be profitable in some concentrated and developed urban markets – possibly including some Australian cities. However, the costs of rapid expansion in new cities and countries, its continued investments in software and marketing, and its attempts to expand into other tangential lines of business (including fast food delivery, vehicle leasing, car-pooling services, and even driverless technology) continue to drive the company deep into the red.

These continuing losses, however, have not deterred financial investors from bidding up the value of the company. Uber has no shares which trade on an open market; the estimated market value of the company, therefore, depends on the value implied by the most recent equity investments in the firm (measured by the amount of capital


\textsuperscript{35} Newcomer, 2018, op cit.
invested relative to the share of equity which those new investors received). On the basis of the most recent equity transactions, the market value of Uber is currently estimated at $48 billion (U.S.) \(^{36}\) – more than long-standing industrial giants such as Ford Motor Co. or General Motors.

This is surprising for a company that has never declared a dollar in bottom-line profit, and is not likely to do so within the foreseeable future. Uber’s inflated valuation is a product of modern financialized business strategies, in which investors attempt to extract profit from businesses even in the absence of operating profits. Intense investor excitement in “hot new prospects,” combined with the capacity of flexible financial markets to generate purchasing power to pay for large and speculative financial placements, has made the owners of Uber fantastically wealthy – on paper, at least. Until recently, company founder Travis Kalanick (recently removed as CEO after a string of scandals) owned an estimated 10 percent or more of the firm’s equity; \(^{37}\) his personal stake in the company would thus have been worth at least $5 billion (U.S.). \(^{38}\) Other investors (especially those who bought into the company early in its history) are also worth billions.

It is ultimately impossible for a company to maintain such high valuations without generating actual profits from its day-to-day business. Either Uber will learn how to make profit from its rapidly-growing operations, or else those market valuations (and the fortunes of its investors) will collapse. However, in the meantime, financialized processes have generated enormous up-front wealth for Uber’s owners (on the expectation shared by enough investors that Uber will someday be profitable). And that wealth is not unrelated to the substantial economic subsidies which Uber’s drivers contribute to this brash operation.

To justify buying into a company that has never made a profit, investors must have some evidence that the business will ultimately become profitable. On this basis they would examine the relative growth of revenues and costs. Commentators have been encouraged, for example, by growth in Uber’s net revenues, despite yearly bottom-line losses. Those net revenues depend directly on the size of Uber’s commissions (now 27.5 percent for most UberX drivers in Australia), as well as the growth of other

\(^{36}\) Somerville, 2018, op cit. The represents a sharp decline from previous market valuations which exceeded $70 billion (U.S.) in mid-2017. The erosion of Uber’s valuation reflects reputational damage caused by several scandals, uncertainty regarding the firm’s corporate governance, and most importantly a growing concern that the firm’s business model may never be profitable.

\(^{37}\) Again, since Uber is not publicly-traded precise ownership details are not public; Kalanick has retained a majority of voting shares, and hence effectively controls the firm despite his minority stake.

\(^{38}\) Kalanick is reported to have recently sold about one-third of his personal shares as part of a new investment in Uber by the Japanese conglomerate SoftBank; see Somerville, 2018, op. cit.
business lines (like car-leasing, car-pooling, food delivery, and others). If Uber were required to pay its drivers in line with established minimum wages, however, those net revenues would decline dramatically. In this regard, the exploitation of Uber’s drivers, and the subsidies they effectively pay the firm through the labour they provide at rates below standard minimums, are an essential precondition for the fortunes of Uber’s owners. Uber’s drivers make less than minimum wage, and this directly underpins the vast fortunes of wealthy individuals who own the firm.
Conclusion: Innovation versus Exploitation

The genuinely innovative and productive aspect of Uber’s business is a convenient and efficient dispatch application, which many consumers prefer to traditional methods of booking a taxi (thanks to its simplicity, and its provision of real-time information regarding the vehicle’s approach). But the company’s growth has also depended crucially on work practices which impose enormous risk and costs on the people who actually perform this service. Drivers have no guarantees of hourly or total incomes; they are responsible for all costs associated with operating the vehicle; they are not paid for idle waiting time (which gets worse as the supply of Uber drivers grows) or for time spent collecting passengers; and they face many other risks and costs (including the absence of protections and entitlements, like access to paid leave and superannuation, which are considered basic rights for other Australians).

Surely the genuinely productive aspects of Uber’s dispatch system could be implemented without simultaneously incorporating such negative and exploitive labour practices. There is no automatic or necessary connection between a convenient phone-based dispatch app, and a business model which pays drivers less than the minimum wage and denies them access to normal entitlements. To the contrary, if the Uber app genuinely allows for a more convenient and efficient point-to-point transportation service, the company should be able to pay more than competing firms (since strong customer loyalty would allow the firm to charge a premium for its service). Uber could immediately boost average net incomes of its drivers to levels commensurate with traditional labour standards, simply by lifting its price structure and/or reducing its take of total revenues. If the convenience of its booking system were the true source of its success, paying fair wages should not interfere with its continued growth.

In reality, however, Uber’s business model is premised on creatively leveraging the advantages of its dispatch system in order to evade traditional labour regulations (and other inconvenient taxes and regulations). Uber’s uber-exploitation of its drivers merely provides an extra injection of profit which has fueled the rapidity of its expansion – and the stratospheric rise of its market valuation.

Our analysis suggests that the effective hourly net incomes of Uber drivers, after accurately accounting for the full costs of vehicle operation and other deductions from gross revenues, are less than half the weighted-average minimum wage rates specified
for waged passenger transportation workers in the relevant Modern Award. The provision of labour at rates far below the minimum wage constitutes an effective subsidy to Uber and its owners (some of whom are billionaires), paid by its drivers. The aggregate total value of that subsidy is worth hundreds of millions of dollars from the Australian economy alone – and billions more are “donated” by Uber drivers in other countries (where similar concerns are expressed that driver net incomes fall below minimum wages). The subsidies paid by UberX Australian drivers exceed the entire flow of net revenues collected by Uber; and paying drivers the minimum wage (without altering Uber’s margin) would entirely eliminate UberX’s cost advantage relative to conventional taxis.

Innovations in digital technology – such as Uber’s successful dispatch app – hold great potential to provide new and better goods and services, spur new industries, and lift living standards. But if employers are given free rein to apply those innovations while ignoring traditional social standards and benchmarks with impunity, then the benefits of new technology will be distributed in a very lopsided manner. Evidence of the costs that are imposed on Uber’s drivers – and other workers in the so-called “gig” economy – via exploitive and insecure work arrangements, should spur regulators and policy-makers to act quickly to protect traditional labour standards in the digital economy.

One immediate policy implication of this research is that Australia’s existing laws and regulatory practices regarding the distinction between an “employee” and an “independent contractor” badly require strengthening and modernisation. The notion that Uber drivers actually run their own independent businesses, and that Uber in fact “works for them” (as a mere supplier of information services), is not credible given the nature of the working relationship between drivers and this company. Uber can retain and discharge drivers; Uber instructs drivers where to pick up passengers and where to take them; Uber controls all payments associated with the business; Uber establishes standards regarding vehicles, service, and driver behaviour which are binding, regardless of the preferences of drivers and passengers. Uber clearly exhibits a degree of control over its drivers (up to and including the power to deprive them of their livelihood) that is not at all consistent with a practical understanding of “independence.”

This reality needs to be confronted and addressed by lawyers and regulators. One recent judgment from the Fair Work Commission has considered the employment status of Uber drivers, in the context of an application by a self-represented former Uber driver for compensation for unfair discharge. The Commission found in favour of Uber, by concluding that the dismissed driver was not an employee according to the

---

current wording of relevant law. This decision is certainly not the end of the matter, however: the presiding Commissioner noted that existing laws were enshrined before the advent of modern digital business models, and indicated explicitly that law may need to evolve to reflect those practices. Moreover, Uber is sure to face more serious and well-resourced legal challenges in coming years in Australia (especially in the wake of judgments in the U.K., the European Union, and some U.S. states which have confirmed that Uber drivers are indeed employees). An ongoing investigation by Australia’s Fair Work Ombudsman may also have repercussions for the employment status of Uber drivers.

Australian legislators should move quickly to further investigate the low net incomes of Uber drivers (and other workers in digital platform businesses); document the relationship between those incomes and traditional minimum labour standards; and then determine the most effective reforms to existing laws and regulatory standards, so as to afford those workers with the same basic protections (including minimum wages, access to leave, and superannuation entitlements) as are afforded to other workers in Australia.