

An Examination of Taxi Apps and Public Policy Regulation

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In early July 2015, Toronto taxi drivers threatened to strike during the busy Pan Am games period after the launch of transportation app Uber. After meeting with the Mayor of Toronto and city councillors, the strike was called off, but issues still persist within the taxi industry. Platforms such as Uber are just one example of the growth of the sharing economy, also known as the "peer-to-peer" economy. This type of market is possible because of digital platforms which replace traditional markets as a venue for exchange of goods and services. However, such platforms blur the line between personal and professional, creating a difficult situation for policy makers. While the traditional taxi industry is subject to government intervention, policy makers are tasked with deciding on the focus of regulatory interventions for transportation apps. This paper will argue that regulatory interventions on ride-sharing platforms should focus on coerced self-regulation so as to solve current issues of market failures such as asymmetrical/imperfect information, externalities and destructive competition, while not impeding on consumer welfare; consequently, consumers will be better off with deregulated ride-sharing platforms than the current system. To explain why ride-sharing platforms can be self-regulated, this paper will first explore modern taxi regulation as a way to correct market failures. Second, it will look at various forms of self-regulation which involve varying degrees of government intervention. Then, it will analyze how self-regulation can work through criteria imposed on the industry.

The taxi industry, regulated by municipalities, has one of the strictest sets of regulations in the Canadian economy. Kandlikar asserts that the roots of modern taxi regulation began in the Great Depression era (5). Due to mass unemployment, many workers entered into the taxi market; however, they did so illegally in order to bypass licenses and quality regulations. Many of the cars were in poor and dangerous conditions, but were inexpensive options to recently

unemployed workers (5). Although the supply of taxis rose, increased unemployment and decreased incomes caused a decrease in demand for taxis, resulting in an imbalance of supply and demand. Ultimately, this led to issues in the industry, forcing policy makers to implement regulations.

Taxi regulations are based on the idea of market failures within the industry. When these inefficiencies occur, regulation by governments are meant to correct the market failures. There are three main market failures associated with the taxi industry, including asymmetrical/imperfect information, externalities and destructive competition.

Asymmetrical/imperfect information occurs when a consumer lacks adequate information to make a rational choice. In the taxi industry, a consumer does not know the quality of the car nor the driver. Specifically, the consumer will not know the driver's qualifications nor their intentions. This is also known as a credence good because the quality of a service cannot be determined until after the consumer (i.e. the passenger) has consumed the good. The passenger is then unable at the start of the ride to determine if the fare they will pay is accurate. Thus, the driver may take advantage of this situation, and take a longer route or overcharge. Uncertainty about quality can also lead to a decrease in demand.

Externalities are a second type of market failure which occurs when either the cost or benefit of production are not added to the market price of a good or service. These costs or benefits are then passed from producers and consumers onto others. Cohen and Sundararajan argue that externalities occur in the taxi industry due to an additional taxi that may cause congestion and lengthen other drivers' travel times (122). Pollution is another form of an

externality which is caused by an increase in cars on the road. However, the fare price of a taxi ride does not include the cost of these externalities.

As exemplified in the situation during the Great Depression, the taxi industry can experience destructive competition. The act of transporting passengers requires low capital costs, specifically only a second-hand vehicle. With such low upfront costs, many suppliers will enter the market. Further, taxis work in a small geographic area. This means that the reach of their services to demand is limited to the area where they work. An increase in supply and steady levels of demand will have a more significant effect on the number of passengers each worker will serve. Drivers may increase rates or decrease quality in order to compensate as incomes are decreasing, which will negatively affect consumers.

Ultimately, governments intervene in order to correct these market failures. Passengers are protected from asymmetrical/ imperfect information through quality controls which enforce minimum standards and controls. This type of regulation includes limitations on vehicle age, as well as driver screening and metered fares. Externalities such as road congestion can be mitigated by limiting the number of taxis in a particular market. However, some externalities such as pollution will continue to be present, and government interventions to prevent such actions are not part of current regulations. Lastly, governments can implement quantity controls to limit the number of taxis within a jurisdiction in line with demand. This is also done by raising entry barriers. In 2014, taxi licences sold for an average of \$118, 235¹ (Cain, Global News). This limits individuals from entering the market because they need more capital than just a second-hand vehicle. Because of these market failures, public policy makers implement strict regulations, but current peer-to-peer business models are challenging the status quo.

¹ This price is significantly decreased from previous years due to the introduction of Uber.

Ride-sharing platforms have already undertaken corrective measures to eliminate market failures. Even without government interventions, ride-sharing platforms such as Lyft conduct in-person driver screenings, including an assessments of driver history and a criminal background check. Digital technologies also reduce information asymmetries (Cohen and Sundararajan 121). Mainly, this occurs through the creation of reputational feedback mechanisms (Mitchell and Thierer 15). Reputations can travel through word of mouth, but rarely does this translate into information regarding qualifications or intentions of specific drivers to their passengers. Although the market aims to set standards, consumers do not receive previous feedback regarding their specific driver. With online feedback mechanisms, consumers can receive prior information regarding their driver. According to the Uber website, passengers can "rate [their] experience and leave additional feedback about [their] driver." Lastly, a driver's intentions are hard to measure and correct with regulations. Cases of sexual assault on passengers occur in both the regulated taxi market (CTV Kitchener) as well as through the ride-sharing market (Spurr, The Toronto Star). Therefore, neither industry has developed a way to correct inadequate information regarding a driver's intentions.

Externalities may occur if extra vehicles are on the road, increasing congestion, commute times and pollution; however, ridesharing can actually reduce congestion and emissions (Rayle et al., 2). In ridesharing situations, travellers are grouped together with others heading to similar destinations. For example, Uber offers UberPool in order for consumers to share a ride and split the cost, also reducing negative externalities. Further, suppliers in ride-sharing markets may offer their services only in situations where passengers are headed to similar destinations as the suppliers were intending to go. For example, an Uber driver is heading from Mississauga to downtown Toronto, and posts this trip as an available driver. Those also heading in this direction

can see this trip and request a pick-up. This contrasts with the taxi industry, as the main concern is transporting passengers for a profit without a common destination for the driver and the passenger.

Instead of correcting destructive competition, ride-sharing platforms capitalize on low entry costs. It can be argued that savings are then passed onto the consumer in the form of decreased rates. However, more data is needed to determine if these new platforms mitigate or enhance destructive competition.

Although some areas of market failure have or will be corrected through peer-to-peer business platforms, these markets should not be completely unregulated. Because these markets are relatively new, some level of government oversight is necessary, at least until enough data is available to determine the extent to which the peer-sharing economy can correct market failures. Since policy makers lack data and agreed upon terms for taxi apps, they were forced to quickly determine whether these platforms and services fall under classic definitions of for-hire services (Rayle et al., 3). Although different jurisdictions have different responses, many of these solutions are short-term until adequate and appropriate regulation is implemented. For example, a recent bid to ban Uber from operating in Toronto was rejected by the Superior Court (Oved, The Toronto Star). Regulation uncertainties can lead to a "one size fits all" approach where new peer-to-peer platforms are subject to older regulations. However, in order to avoid market failures and capitalize on benefits of this new platform, the taxi industry and ride-sharing platforms should be deregulated down, not regulated up.

Instead of applying taxi regulations to peer-to-peer platforms such as Uber, a new form of regulations should be established for this market: self-regulation. As stated by Cohert and

Sundararajan self-regulation is not the same as deregulation or no regulation. Instead, public policy makers shift the onus from government and the public sector to the industry (116). Black (2014) contends that there is "no clear dichotomy between state regulation and non-state regulation, but a continuum between the two" (112). Therefore, regulation for taxi platforms do not solely need to be the responsibility of the state, but the state does not need to be fully removed from the process either. Black explains four types of self-regulation: *Mandated self-regulation*, where government requires or mandates a collective group to formulate and enforce rules within a framework set by government; *sanctioned self-regulation*, where the government approves rules which are formulated by the collective group; *coerced self-regulation*, where the threat by government of statutory regulation causes the industry to impose regulations; and *voluntary self-regulation*, where there is no government direct or indirect involvement.

Coerced self-regulation can help correct market failures while not impeding on digital taxi platforms. Governments and public policy makers are concerned about the entry of ride-sharing platforms. This eliminates the possibility of voluntary self-regulations. Because the taxi industry is currently so heavily regulated, some form of government involvement is necessary, at least in initial stages. Coerced regulation is the next step for this industry because governments can gradually detach themselves from heavy, outdated regulation. Further, new forms of technology which encourage peer-to-peer platforms are likely to increase. For the government to monitor and regulate all these industries, it would be a great strain on resources. Therefore, now is the correct time to look at changes to regulation. As discussed earlier, some corrective measures have already been taken by the industry to account for market failures, but more regulation needs to be implemented in order to ensure the legitimacy of self-regulation.

While self-regulated organizations exist in today's world in peer-to-peer markets such as law and medicine, they require two main elements to be successful, including a credible enforcement mechanism and a perception and strong reputation of legitimacy (Cohert and Sundararajan 127-128). First, the self-regulated organization needs to be credible in setting its rules and regulations. This includes setting safety standards, monitoring compliance with standards, and routinely evaluating individuals. This is in line with coerced self-regulation because the taxi app industry is able to impose its own rules and regulations. The industry will not gain instant credibility, but can gain respect with a fair regulation process. Ride-sharing platforms can continue to screen drivers for criminal history as well as driving records. To ensure legitimacy, platforms can look into governmental criminal background checks (many platforms, including Uber, already implement this) as well as private companies for further background checks. Next, self-regulated organizations need a public perception of legitimacy, especially in enforcement capabilities. This means that it is not the sole responsibility of the government, law enforcement or judiciary to enforce regulation, but the responsibility of the industry itself. Feedback mechanisms can work to police members. Platform organizations can use reviews to threaten disconnecting or expelling members who do not comply. Doing so would require minimal effort on the platform, but would show legitimacy in enforcing standards. This is vital for the industry because deregulation will only occur if the government sees this as a benefit to consumers and the industry, more than it is hurting it. However, if enforcement is illegitimate, government regulation will be required, which would likely not be in favour of the peer-to-peer platforms.

Consumers will benefit not only from corrected market failures but also more efficient markets through innovation. Placing heavy regulations on new innovations should be done when

necessary, but not as a quick reaction without careful consideration. First, this may discourage other entrepreneurs from innovation. Further, regulation may not always achieve its end goals, as exhibited in the taxi industry. Proponents of taxi regulation reform claim that with high costs to entry and protection from new entrants, some measure of monopoly is obtained (Mitchell and Thierer 12), which ultimately hurts consumers. In conclusion, regulation must be carefully considered by policy makers before shaping the private sector.

Even with potential for backlash from the taxi industry, regulatory interventions on ride-sharing platforms should focus on coerced self-regulation instead of traditional government intervention. Current issues of market failures such as asymmetrical/imperfect information, externalities and destructive competition can be corrected through legitimate self-regulation, while not impeding on consumer welfare. Consumers will be better off with innovative approaches that look for efficiencies within the industry. Modern taxi regulation is outdated, and peer-to-peer sharing markets will force policy makers to re-evaluate current approaches. This applies not only in the taxi apps industry, but also peer-to-peer sharing markets such as hospitality and examples like AirBnb. Ultimately, policy makers will need to evaluate the growth of the sharing economy, and decide ways to regulate market failures without impeding on consumer welfare and innovation.

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