#### NATIONAL CENTER FOR POLICY ANALYSIS

# Taxis versus Uber: The Regulations, the People, the Money and the Future

Backgrounder No. 184

by David Sobczak

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The ride-hailing service Uber is only six years old, yet it has already inspired a host of imitators, such as Lyft, Wingz and Taxify. It has also sparked fierce opposition from the taxi industry, which is being undercut by Uber's business model.



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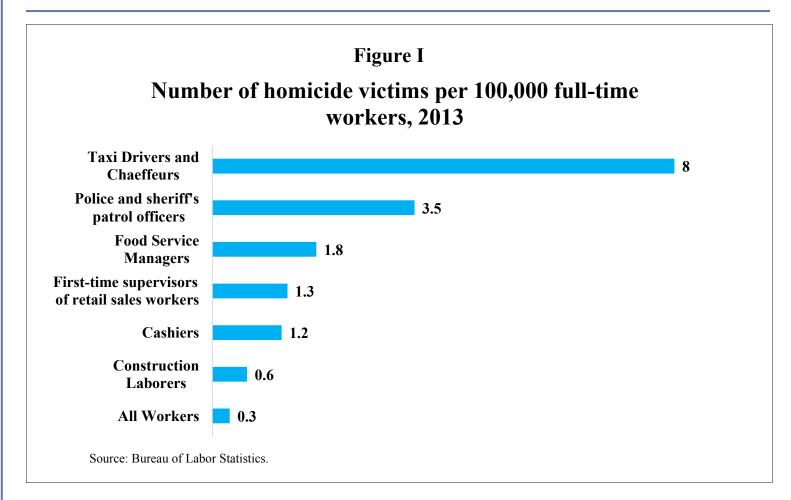
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How Taxis Cornered the Ride-sharing Market. When motor cars became widespread early in the 20th century, the Progressive Era was in full swing. Progressive politicians believed that economic competition is wasteful, and supported greater regulation of business. At the municipal government level, various progressive reforms of the taxi industry included price fixing, limiting the number of taxicabs, mandating how fares are collected, dictating the hours of operation and eliminating competing taxi companies. In many cities, drivers were required to purchase and display medallions, signaling they were allowed to operate in that market.

These regulations generated higher prices that ensured the profitability of the taxi companies and led to a black market for medallions. Because taxis without medallions were illegal and the number of taxis in a market was capped, the taxi supply was artificially lowered, raising the cost of medallions. Progressive Era laws remain in many American cities; currently, a black market license costs as much as \$400,000 in Boston, Mass. which is still less than the official price. High costs deter startup companies, few of which can afford to purchase six-figure medallions. However, in the past few years, taxis have faced competition from self-described ride-sharing services. (These are more accurately described as ride-hailing or ride-booking services because ride-sharing services include noncommercial programs that allow commuters to pick up passengers to qualify for high occupancy vehicle, or HOV, lanes.)<sup>2</sup> The commercial ride-sharing services utilize smartphone technology to circumvent local transportation regulations.

What Makes Uber Different. The basic business model of Uber and other new ride-hailing services distinguishes them from the taxi industry. Typically, taxi riders have to hail a cab on the street or wait at a designated passenger pick-up location. The next available taxicab is required to pick them up, regardless of the passenger's destination. The driver typically starts a meter



that charges the rider at a rate fixed by city regulators and based on distance or the duration of the trip. Upon arriving at the final destination, the rider pays the fare with cash or, if the option is available, via credit card.

In contrast, Uber customers download a software application (app) to their smartphones and provide their credit card information. When the customer needs a ride, he activates the app and sets his location. A driver is dispatched, and the driver's picture and vehicle details are provided to the customer, along with a map that tracks the driver's location. Once the passenger is picked up, payment is determined via a meter system comparable to a taxi's. When the ride ends, the fare is charged to the passenger's debit or credit card.

Uber rates are competitive with taxis. In January 2016, Uber dropped its minimum fare from \$8 to \$7, its per-mile rates from \$2.15 to

\$1.75 and its per-minute rates from 40 cents to 30 cents.<sup>3</sup> Uber claimed that it was trying to stay competitive with taxi services and Lyft, which also lowered its prices. Unlike taxis, the new ride-hailing services have price flexibility; many vary rates by time of day, charging less when demand is lower and more late at night and/or on weekends and holidays.<sup>4</sup>

After the trip, the passenger is invited to evaluate the quality of service received. If a driver garners too many unfavorable assessments, he or she risks being barred from working for Uber. Drivers also rate customers; passengers with particularly negative reputations may be banned from hiring Uber drivers in the future.

An Uber driver must have a current driver's license, be in good health and able to pass a background check. Drivers also need a smartphone and a vehicle, but either can be leased from Uber.<sup>5</sup> Because of the lighter regulatory burden, it is considerably easier and cheaper for



large numbers of people to become Uber drivers rather than licensed taxi drivers.

Demographics of the Industries. Considering what is at stake in the competition between taxis and Uber, it is worth examining the human factor — drivers and riders

*Drivers*. Who are the drivers? According to a study by economists Johnathan Hall, of Uber, and Alan Krueger, of Princeton University:

- Uber drivers are generally younger than taxi drivers. Specifically, drivers 40 to 49 years old are fairly evenly distributed between Uber and taxis
  - providers (26.3 percent and 27.2 percent, respectively); 30 to 39 year olds comprise 30.1 percent of Uber's drivers compared to 19.9 percent of taxi drivers; and 50 to 64 year olds make up 21.8 percent of Uber drivers compared to 36.6 percent of taxi drivers.
- Uber drivers are typically better educated than taxi drivers. Most have some college experience or an associate's degree and many have at least a four-year degree; in contrast, most taxi drivers do not have college experience and those that do rarely go beyond the associate's level.
- The largest demographic group of Uber drivers is white non-Hispanics (40.3 percent) and the second largest is black non-Hispanics (19.5 percent); whereas the largest group of taxi drivers is black non-Hispanics (31.6 percent) and white non-Hispanics is the second largest (26.2 percent).

# Figure II Average Wage Range: Taxi vs. Uber



Source: Johnathan V. Hall and Alan B. Krueger, "An Analysis of the Labor Market for Uber's Driver- Partners in the United States," Scribd., January 22, 2015. Available at http://www.scribd.com/doc/253410228/An-Analysis-of-the-Labor-Market-for-Uber-Drivers.

■ Finally, more taxi drivers are married than Uber drivers (59.4 percent versus 50.4 percent, respectively), while the percentage of parents working for either service is about even (46.4 percent for Uber, 44.5 percent for taxis).

Passengers. What are the demographics of ride-sharing passengers? Among taxi clientele, seniors, homemakers, the disabled and the poor each account for a much higher share of taxi trips than their share of the population.<sup>7</sup>

As for Uber, 70 percent of its riders are 16 to 34 years old, most of whom identify themselves as in the "mid 50%" income bracket; only 5 percent live in rural areas.<sup>8</sup> Certify, a business-expense software firm that gathers travel-expense data, found that over one year (2015), Uber went from the least-utilized "ground transportation" service among business people to the most utilized. ("Ground transportation" includes taxis and car rentals.)<sup>9</sup>

## Taxis versus Uber: The Regulations, the People, the Money and the Future

On a related note, there is some evidence that, in comparison to taxi drivers, Uber drivers discriminate less against minority riders. For instance, an investigation by the Washington, D.C.-based WUSA 9 news agency found that, with respect to hailing taxis, black passengers wait longer and are 25 percent more likely to be stranded than white passengers. <sup>10</sup>

Conversely, Uber's policy of not revealing a rider's personal information or desired destination until the driver accepts the job, coupled with its policy that drivers must accept at least 90 percent of all requests, could offset racial bias and prevent drivers from refusing to serve certain areas. In fact, an Uber study in Chicago concluded that 4 in 10 rides start or end in areas underserved by taxis.<sup>11</sup>

Safety Issues. As Uber has grown in popularity, the safety of both drivers and riders has been questioned. Uber (and ride sharing in general) is not as dangerous as its critics contend, according to the Cato Institute. A disproportionately high number of taxi drivers are homicide victims, due to the large amounts cash drivers handle, along with passenger anonymity. In contrast, Uber drivers are generally safer, given that they do not engage in cash transactions and have access to their riders' identifying information, discouraging riders from committing crimes against drivers. [See Figure I.] Furthermore, because drivers and riders evaluate each other after a ride, individuals who garner consistently low ratings, or even those who appear threatening for a single ride, risk being barred from Uber in the future.

Additionally, Uber's background checks on potential drivers are often more stringent than those for taxis drivers. In fact, Uber employs Hirease and SterlingBackcheck to investigate the Multi-State Criminal Database along with federal and county databases and rejects any applicant who has been convicted of (among other offenses) hit-and-run, violent crimes and sexual assault within the past seven years. While some critics argue that fingerprinting should be required, studies have found that fingerprinting databases, particularly the FBI's, do not provide

a full case history of the individual under investigation and may even unfairly disqualify an applicant.<sup>12</sup>

**Drivers' Pay.** The Hall-Krueger study mentioned previously compared the average hourly Uber driver revenue to the wages of employed taxi drivers and chauffeurs in six major cities. It found that Uber drivers make \$16.20 to \$30.35 per hour while taxi drivers make \$11.73 to \$15.17 per hour.<sup>13</sup> The discrepancy is partly due to the regulated prices associated with the taxi industry, while Uber's surge pricing encourages drivers to work peak hours of activity, such as holidays.<sup>14</sup>

Response of the Taxi Industry: Does This Mean War? The new ride-dispatching services are providing stiff competition to the taxi industry, which is countering on multiple fronts. Some taxi services, such as Toronto's Beck Taxi and Royal Taxi, have implemented their own app services, complete with credit card payments, vehicle tracking and advance ordering; but, unlike Uber, rates are not subject to price surges during especially active times or dates. Likewise, some Uber rivals are considering establishing a global network of taxi providers.

Lobbying. Some taxi companies and associations are taking the legislative approach. Rather than compete against Uber, they have lobbied lawmakers to enact legislation that would require ride-hailing services to adhere to the same regulations faced by taxis or ban the service entirely. Such efforts have even resulted in Uber and its CEO, Travis Kalanick, facing criminal charges. In South Korea, they were indicted for providing and facilitating transportation services without proper licensing.<sup>17</sup>

Similarly, Uber may be defeated at the ballot box. This was the case in Austin, Texas, where Uber, in response to the local government's requirement that ride-hailing drivers be fingerprinted, successfully lobbied to add Proposition 1 to the ballot of a 2016 municipal election. The proposition would have effectively exempted Uber from fingerprinting. Despite an expensive marketing campaign in support of Prop



1, voters rejected the measure by a margin of 56 percent to 44 percent. Many voters agreed with the claim of opponents that Uber was rejecting passenger safety in favor of corporate profits.<sup>18</sup>

Collaboration. There is another, less combative, possibility to consider: What if traditional public transportation agencies decide to collaborate with Uber instead of opposing it? For instance, take traditional demand response services for people with limited mobility, which are dispatched on request and operate from doorto-door. A study by the Brookings Institution found that, due to federal regulations, these paratransit services suffer from tremendous operating costs and have the highest subsidies per passenger of any transportation mode.<sup>19</sup>

The study concludes that, in order to drive down operating costs, public transit agencies consider contracting out demand-response services to companies like Uber and Lyft. Because they do not incur the same regulatory costs as public transit agencies, they could provide the same service at a significantly lower cost. The paper also argues that Uber and Lyft are more likely to update their technologies and dispatch drivers more efficiently than public transit agencies. In addition, riders will enjoy greater responsiveness and convenience because Uber and Lyft can be more readily summoned than traditional services, which may need to be scheduled days in advance.

**Uber Abroad.** The experiment outlined by Brookings may already be underway, as Didi Chuxing (formerly known as Didi Kuaidi), Uber's strongest rival in China, has created an app-based service that not only facilitates privatecar services, but allows users to select a taxi, shared car, shuttle van or bus to pick them up if they so desire. Notably, to address overcrowded flights and trains, Didi Chuxing charged rates comparable to train fares during the 2016 Chinese New Year holiday. Additionally, Didi Chuxing is forging alliances with taxi-hailing apps like Southeast Asia's GrabTaxi and Lyft in the United States.<sup>20</sup> In 2016, Uber sold its business in China to Didi Chuxing in exchange for a stake in the company.<sup>21</sup>

Conclusion. The new ride-hailing services could profoundly affect the taxi industry. If Uber continues to operate under its current model, the taxi industry will be forced to evolve to remain relevant. If they fail to do so, Uber could force them out of the market entirely or, at the very least, provide a more customer-friendly business model that is responsive to market demands. If Uber is outlawed or forced to adopt taxi industry regulations, any impetus for taxi providers to change would be diminished or lost. In that case, ride-sharers, both drivers and passengers, stand to lose.

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#### **Notes**

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## Taxis versus Uber: The Regulations, the People, the Money and the Future

- 10. Russ Ptacek, "Hidden Camera DC Taxi Investigation Documents Blacks Waiting Longer and 25% Stranded in Favor of Whites," WUSA9, May 22 2013.
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- 16. Alison Griswold, "Taxi Apps Are Thinking Seriously About How to Compete with Uber," *Slate*, January 13, 2015.
- 17. Se Young Lee, "South Korea indicts Uber CEO, local unit for transport law breach," Reuters, December 24, 2014.
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- 20. "More than mobility," Economist, January 30, 2016.
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# Recent NCPA Economics Research Publications

**Pamela Villarreal**, "California's Bag Ban: A Wealth Transfer from Customers to Big Grocers," National Center for Policy Analysis, Brief Analysis No. 836, September 7, 2016. - <a href="http://www.ncpa.org/pub/california-s-bag-ban-a-wealth-transfer-from-customers-to-big-grocers#sthash.lrP4WcZh.dpuf">http://www.ncpa.org/pub/california-s-bag-ban-a-wealth-transfer-from-customers-to-big-grocers#sthash.lrP4WcZh.dpuf</a>

In 2014, the California State Legislature passed, and Gov. Jerry Brown signed, Senate Bill 270, a statewide ban on plastic bags scheduled to take effect in July 2015. Before this bill passed, many California counties and municipalities enacted their own plastic bag bans with little fanfare. However, upon reading SB 270, the public discovered that it would line the pockets of grocers at the expense of consumers.

**Colin Combs**, "The Disappearing Gender Pay Gap," National Center for Policy Analysis, Brief Analysis No. 833, August 4, 2016. - <a href="http://www.ncpa.org/pub/the-disappearing-gender-pay-gap#sthash.E4rP2HDk.dpuf">http://www.ncpa.org/pub/the-disappearing-gender-pay-gap#sthash.E4rP2HDk.dpuf</a>

The claim that women only make 77 cents for every dollar a man makes is usually followed by a call for a whole new wave of regulations and pay mandates to stop this discrimination. The gender pay gap is undeniably real; men earn more than women, on average. The question is "Why?"

**Colin Combs**, "Gold Revisited," National Center for Policy Analysis, Brief Analysis No. 832, August 2, 2016. - <a href="http://www.ncpa.org/pub/gold-revisited#sthash.boKkRvuM.dpuf">http://www.ncpa.org/pub/gold-revisited#sthash.boKkRvuM.dpuf</a>

Gold is a useful hedge against inflation and uncertainty, but investing in it speculatively is not always a good strategy. In 2011, the price of gold climbed to historic heights; but since then, it has fallen significantly, though not to pre-Great Recession levels.

**Ryan H. Murphy**, The Deep Causes of Today's Struggling U.S. Economy," National Center for Policy Analysis, Issue Brief No. 196, July 11, 2016. - <a href="http://www.ncpa.org/pub/the-deep-causes-of-today-s-struggling-us-economy#sthash.j0eslr17.dpuf">http://www.ncpa.org/pub/the-deep-causes-of-today-s-struggling-us-economy#sthash.j0eslr17.dpuf</a>

The American economy is growing. But compared to other recessions in the post-World War II era it has not bounced back to its long-run trend. Optimistically, if real gross domestic product (GDP) per capita were following its 1990-to-2007 trend path, it would have hit \$58,000 in 2015. Instead, it remained at \$51,000.

**David Ranson**, "The Positive Side of Negative Interest Rates," National Center for Policy Analysis, Issue Brief No. 195, June 30, 2016. - <a href="http://www.ncpa.org/pub/the-positive-side-of-negative-interest-rates#sthash.oR1y462b.dpuf">http://www.ncpa.org/pub/the-positive-side-of-negative-interest-rates#sthash.oR1y462b.dpuf</a>

John Maynard Keynes said, "When my information changes I alter my conclusions. What do you do, sir?" For Keynesians and non-Keynesians alike, it is excellent advice — essential, in fact — and it applies in spades to the mounting confusion about negative interest rates.

**Danielle Zaychik**, "How the New Overtime Pay Rule Will Hurt the Middle Class," National Center for Policy Analysis, Brief Analysis No. 828, June 14, 2016. - <a href="http://www.ncpa.org/pub/how-the-new-overtime-pay-rule-will-hurt-the-middle-class#sthash.qOdsz5mq.dpuf">http://www.ncpa.org/pub/how-the-new-overtime-pay-rule-will-hurt-the-middle-class#sthash.qOdsz5mq.dpuf</a>

The U.S. Department of Labor has updated Fair Labor Standards Act (FLSA) overtime regulations, raising the threshold at which salaried employees are exempt from overtime pay, effective December 1, 2016. Salaried employees making up to \$913 per week (\$47,476 annually) will qualify for overtime compensation at one-and-a-half times their normal pay.

# Taxis versus Uber: The Regulations, the People, the Money and the Future

**Representative Jeb Hensarling**, "Principles of Financial Opportunity Reforms," National Center for Policy Analysis, Issue Brief No. 193, June 3, 2016. - <a href="http://www.ncpa.org/pub/principles-of-financial-opportunity-reforms#sthash.nedcWcfb.dpuf">http://www.ncpa.org/pub/principles-of-financial-opportunity-reforms#sthash.nedcWcfb.dpuf</a>

The Financial Services Committee of the House of Representatives has a plan to offer reforms as a progrowth, pro-consumer alternative to the Dodd-Frank Act, which is harming the economy and consumers.

**Pamela Villarreal**, "How To Raise Wages," National Center for Policy Analysis, Brief Analysis No. 827, May 25, 2016. - <a href="http://www.ncpa.org/pub/how-to-raise-wages#sthash.X1M2HHC5.dpuf">http://www.ncpa.org/pub/how-to-raise-wages#sthash.X1M2HHC5.dpuf</a>

Since the Great Recession, the unemployment rate has steadily fallen from a high of 10 percent in October 2009 to the current rate of 4.9 percent. However, job gains and a low unemployment rate have not been matched by accelerated wage growth. Wages have only grown about 2 percent annually since 2012.

**David Ranson**, "What Is Important — and Not Important — about Inflation," National Center for Policy Analysis, Issue Brief No. 192, May 19, 2016 - <a href="http://www.ncpa.org/pub/what-is-important-and-not-important-about-inflation#sthash.4Mc9gJWG.dpuf">http://www.ncpa.org/pub/what-is-important-and-not-important-about-inflation#sthash.4Mc9gJWG.dpuf</a>

From early times investors have rightly worried about the instability of the price level. Inflations large enough to wipe out real returns from stocks and bonds are all too common. Does that require that the rate of inflation be a vital consideration in investment decisions? Not necessarily.

**Pamela Villarreal, Jacob Kohlhepp and Anna Shapovalova**, "Should Walmart Imitate Costco? The Variation in Retail Wages," Policy Report No. 381, March 2016. - <a href="http://www.ncpa.org/pub/should-walmart-imitate-costco-the-variation-in-retail-wages#sthash.wfCjoW3K.dpuf">http://www.ncpa.org/pub/should-walmart-imitate-costco-the-variation-in-retail-wages#sthash.wfCjoW3K.dpuf</a>

There has been much debate over the past few years about raising the national minimum wage to \$10 or even \$15 an hour. In areas where the minimum wage is at or slightly above the federal level of \$7.25, unions have complained that big box retailers and fast food restaurants do not pay "living" wages.