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## RESEARCH BRIEF

## The Economics of Ride-Hailing: Driver Revenue, Expenses and Taxes

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We perform a detailed analysis of Uber and Lyft ride-hailing driver economics by pairing results from a survey of over 1100 drivers with detailed vehicle cost information. Results show that per hour worked, median profit from driving is $\$ 3.37 / h o u r$ before taxes, and $74 \%$ of drivers earn less than the minimum wage in their state. 30\% of drivers are actually losing money once vehicle expenses are included. On a per-mile basis, median gross driver revenue is $\$ 0.59 /$ mile but vehicle operating expenses reduce real driver profit to a median of $\$ 0.29 / m i l e$. For tax purposes the \$0.54/mile standard mileage deduction in 2016 means that nearly half of drivers can declare a loss on their taxes. If drivers are fully able to capitalize on these losses for tax purposes, 73.5\% of an estimated U.S. market $\$ 4.8 B$ in annual ride-hailing driver profit is untaxed.

Ride-hailing operators such as Uber and Lyft have collectively taken millions of customers on billions of rides since 2009. These rides are delivered by hundreds of thousands of independent contractors who face uncertain customer demand and bear the expenses of operating a vehicle. This profession is less than a decade old with few established norms and enormous turnover, estimated between $50 \%$ and $96 \%$ per year. (Rosenblat and Stark, 2016; McGee, 2017)

Little comprehensive work has been done to establish population-level statistics on the profitability of ride-hail driving. Ride-hailing operators know what they pay each driver but do not know whether drivers earn additional wages from a competitor nor what
drivers actually spend to operate their vehicles. An individual driver can precisely observe his or her own operational revenue and costs, but does not know whether these are representative of other drivers or other vehicles.

This paper provides one of the first detailed estimates of ride-hailing profit. We combine the selfreported revenue, mileage and vehicle choices from over 1,100 Uber and Lyft drivers with detailed vehicle operational cost parameters for insurance, maintenance, repairs, fuel and depreciation, using a combination of estimates from Edmunds and data from the U.S. EPA and Kelly Blue Book.

Results indicate that profit from ride-hail driving are very low. A Median driver generates $\$ 0.59$ per mile of driving, and incurs costs of $\$ 0.30$ per mile. $30 \%$ of drivers incur expenses exceeding their revenue, or lose money for every mile they drive. (Figure 1) On an hourly basis, the median profit is $\$ 3.37$ per hour and $74 \%$ of drivers earn less than the minimum wage in the state where they operate.

Nearly all drivers report using their vehicle for both personal and ride-hailing use, and more than $80 \%$ of drivers work less than 40 hours per week. However, the vast majority of drivers report that the bulk of the miles they drive are for ride-hailing. Of the five sources of cost estimated per mile (Insurance, Maintenance, Repairs, Fuel and Depreciation), approximately $40 \%$ of costs are attributable to Insurance, Maintenance and Repairs, $40 \%$ to fuel expenses, and $20 \%$ to depreciation.

On a monthly basis, mean profit is $\$ 661 /$ month (median \$310). Drivers are eligible to use a Standard Mileage Deduction for tax purposes ( $\$ 0.54 /$ mile in 2016) which far exceeds median costs per mile of $\$ 0.30 / \mathrm{mile}$. Because of this deduction, most ridehailing drivers are able to declare profits that are substantially lower. Mean drivers who use a Standard Mileage Deduction would declare taxable profit of \$175 rather than the $\$ 661$ earned. These numbers suggest that approximately $74 \%$ of driver profit is untaxed. If
$\$ 661 /$ month is representative, the Standard Mileage Deduction facilitates several Billion in untaxed income for hundreds of thousands of ride-hailing drivers nationwide.


Figure 1: Revenues and Expenses per mile by driver

## References

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## About the Authors



Stephen is the Executive Director of the Center for Automotive Research at Stanford. He has sixteen years of experience in the mobility space, first as an engineer and product manager at BMW and Ford, and later with the U.S. Department of Transportation in vehicle energy policy. He holds a Ph.D., M.Sc. and B.Sc. from MIT. His work has been covered in numerous popular press articles, initiated a Congressional probe, and has been lampooned in The Onion.


Stella Chen is pursuing a joint degree in MBA and MS in Environment and Resources at Stanford. Prior to school, she has five years of experience working at the Electric Power Research Institute as a project engineer scientist, focusing on valuation methodologies for energy storage and renewable energy resources. Stella's interests are in utilities of the future, electric transportation, vehicle-to-grid business models, and distributed energy markets.


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