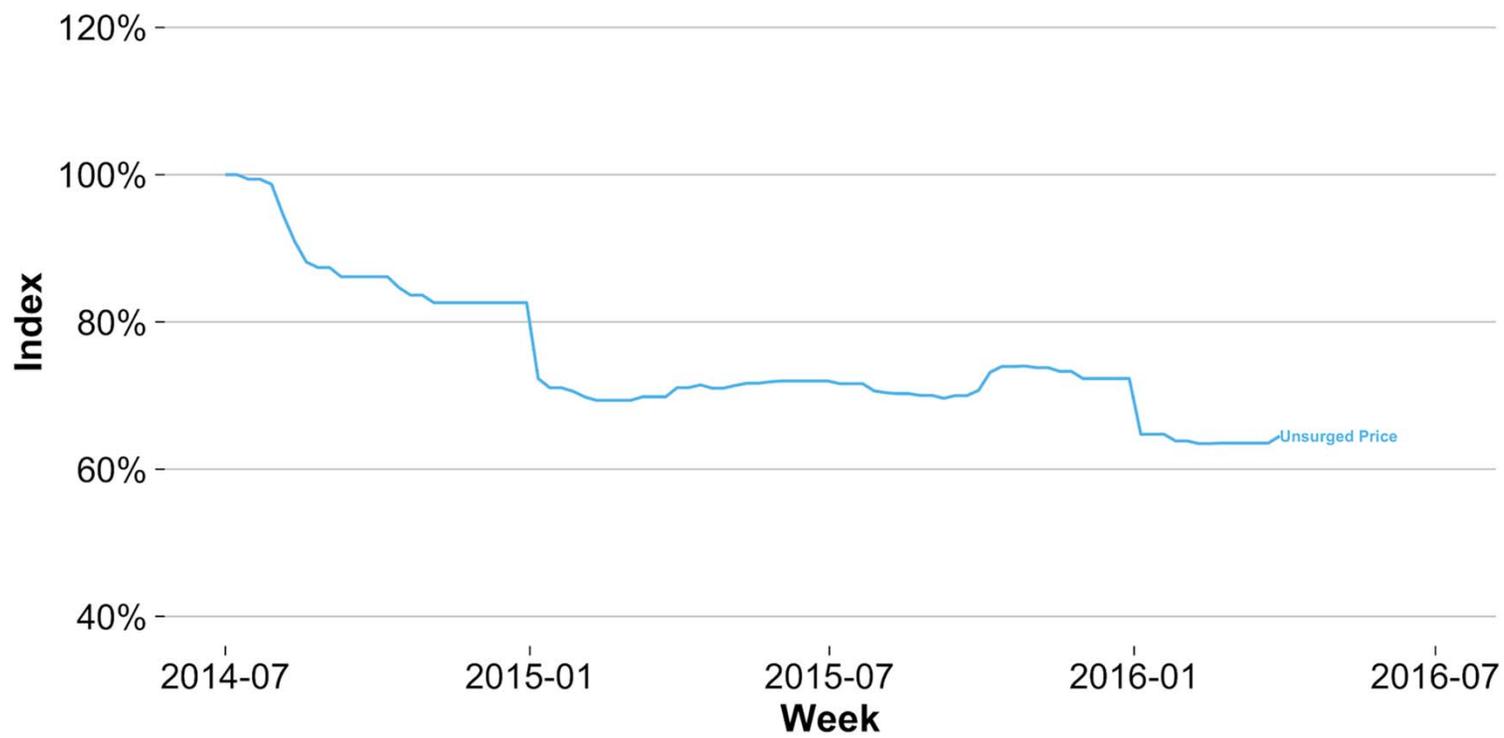


FESAC Slides

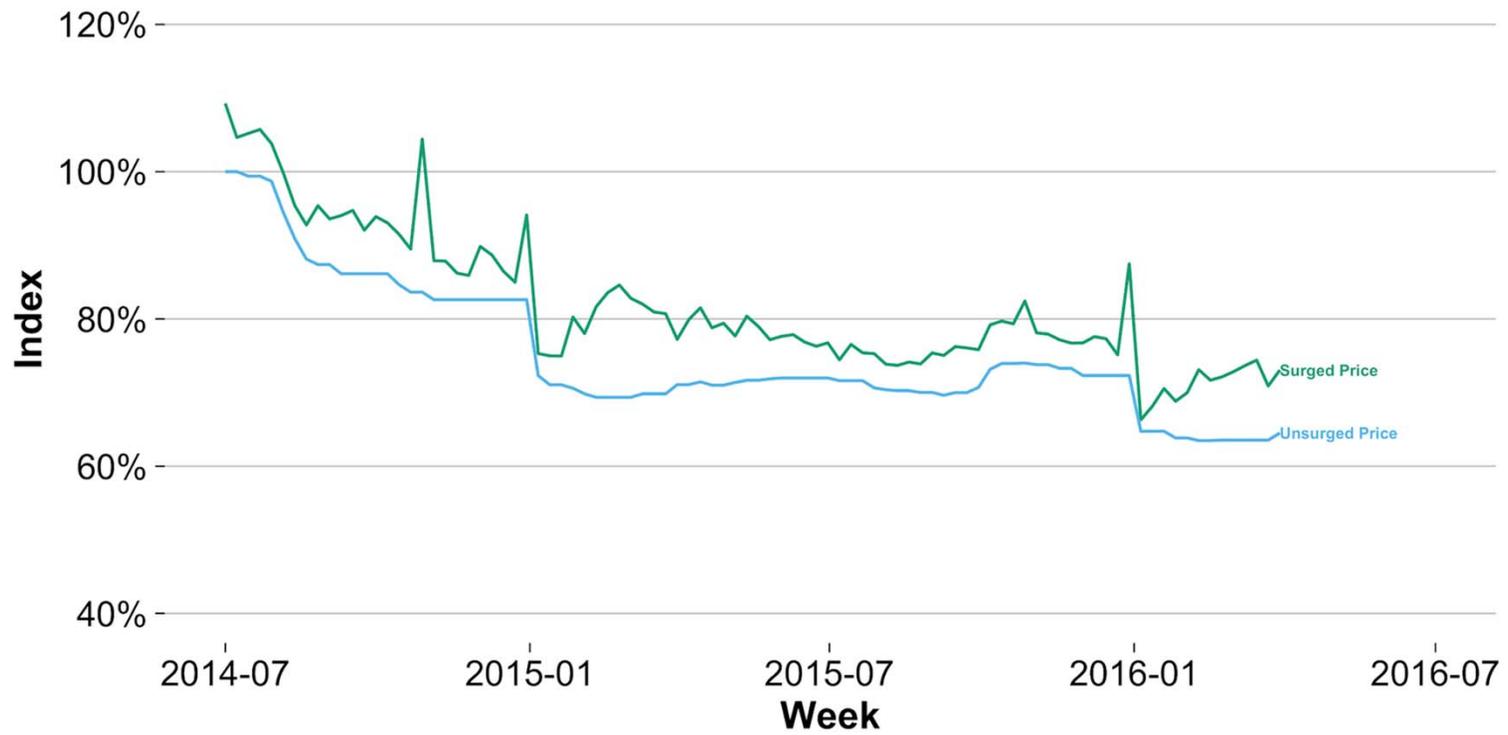
Jonathan Hall
Chief Economist
Uber Technologies

Uber Labor Market Primer

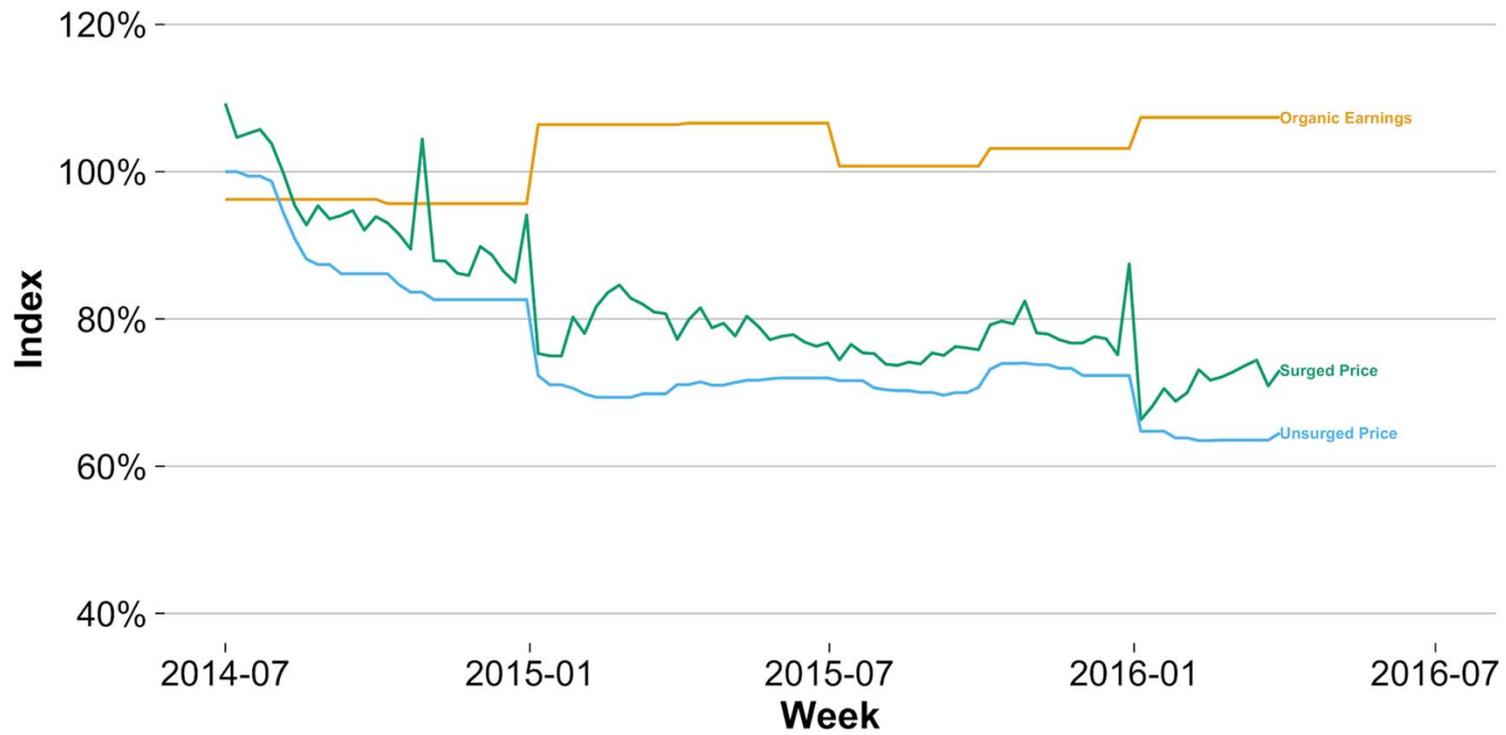
Prices are Falling



Prices are Falling



Earnings Are Stable While Prices Fall



Earnings Are Stable While Prices Fall

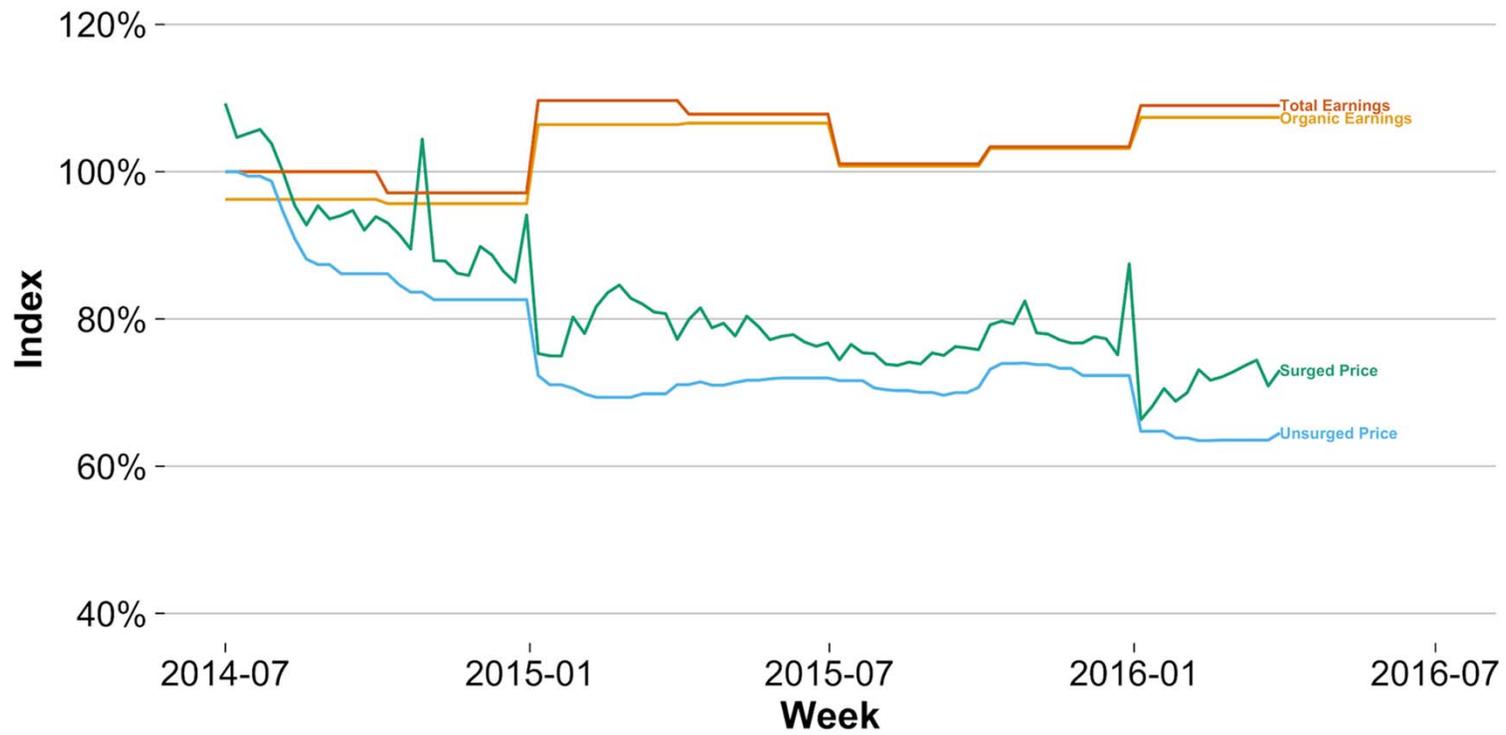


Figure 3: Average UberX market attributes over time for the US city-week panel, as indices

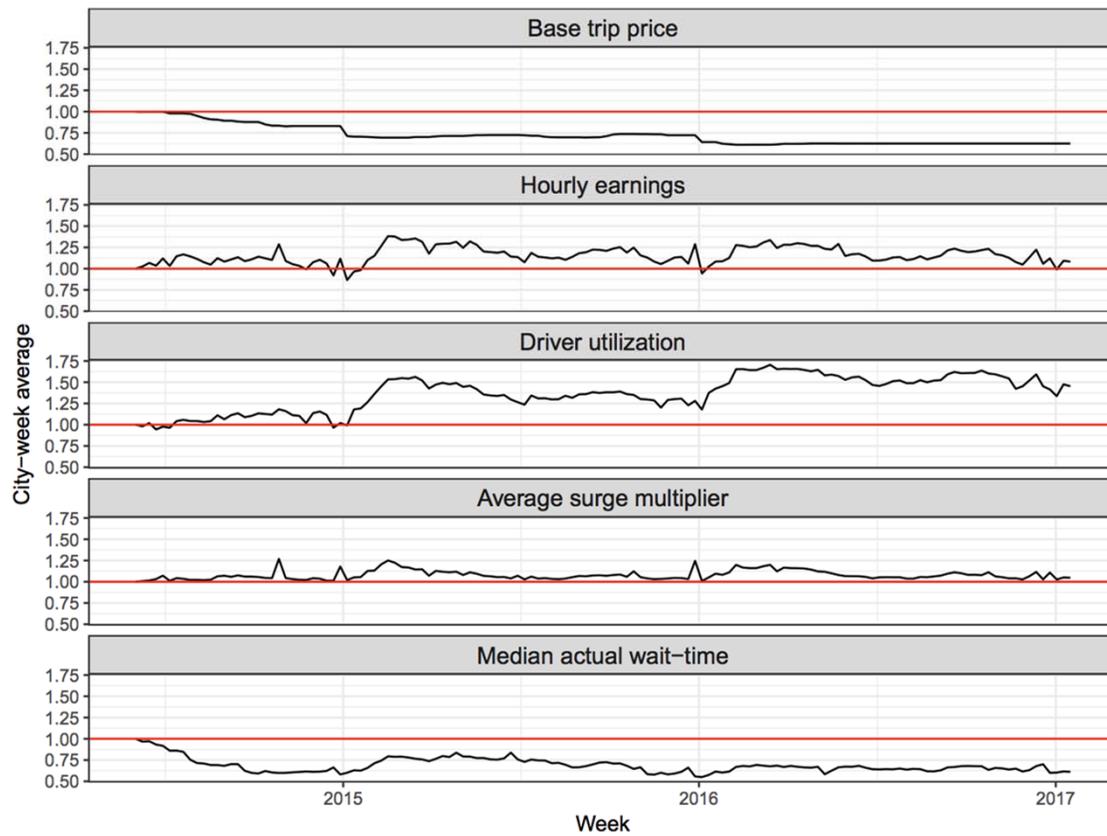
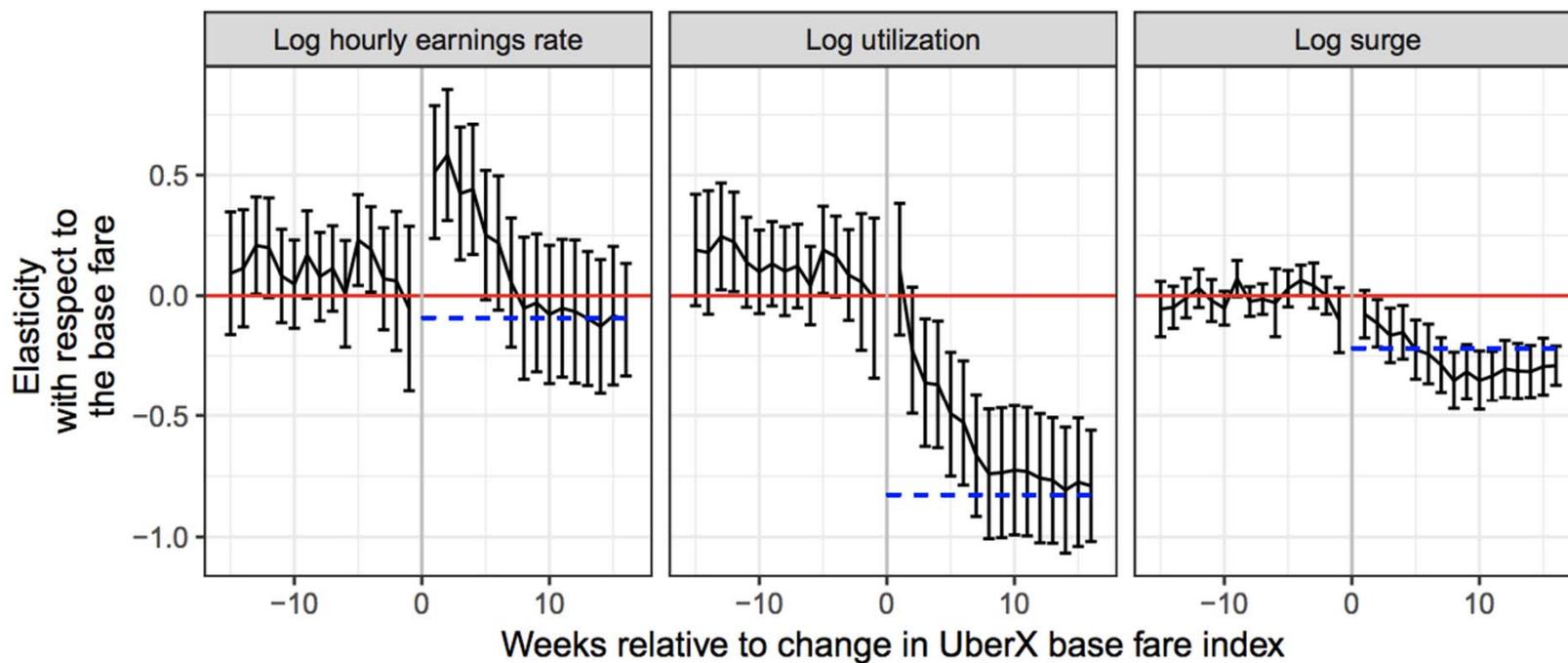


Figure 4: Between-city estimates of the by-week market adjustments to a change in the UberX base fare index



Productivity vs Consumer Surplus

Figure 4: Between-city estimates of the by-week market adjustments to a change in the UberX base fare index

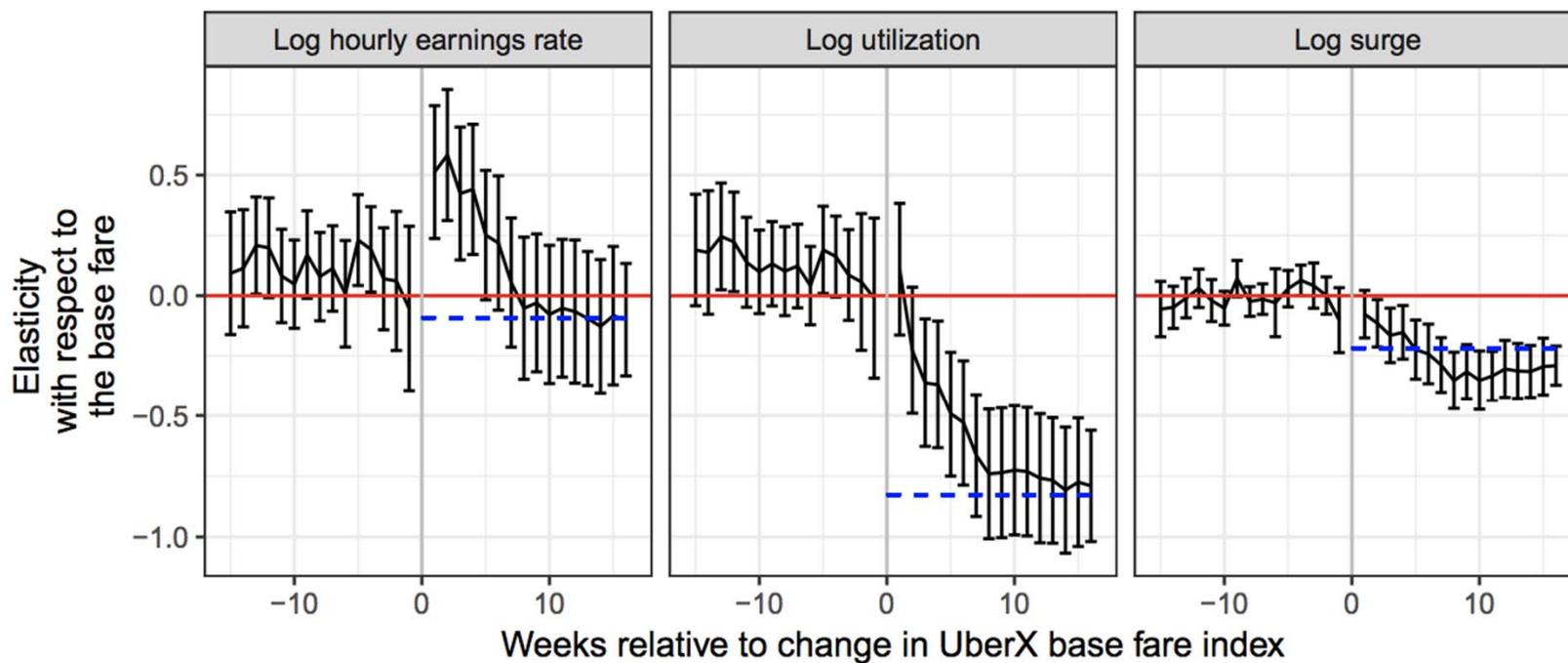


Figure 8: UberX Driver Weighted-Average 1-Percent Trimmed Mean Earnings Over Time

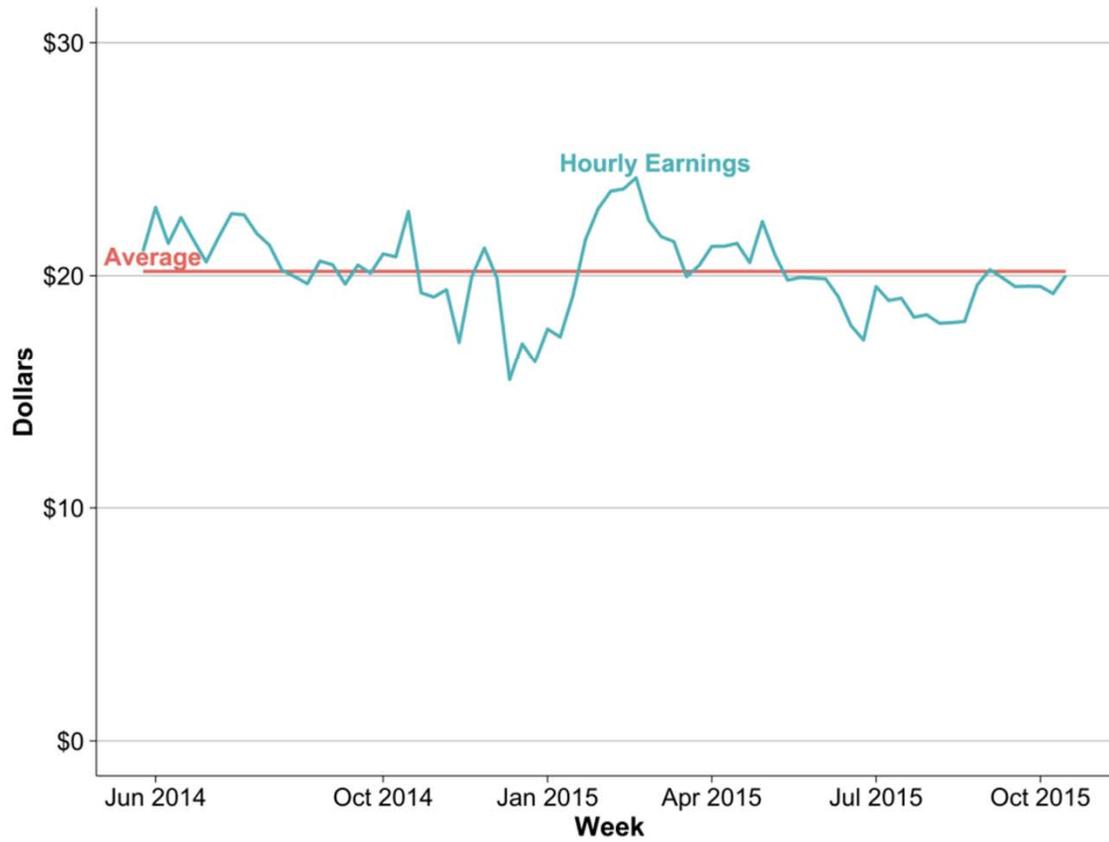
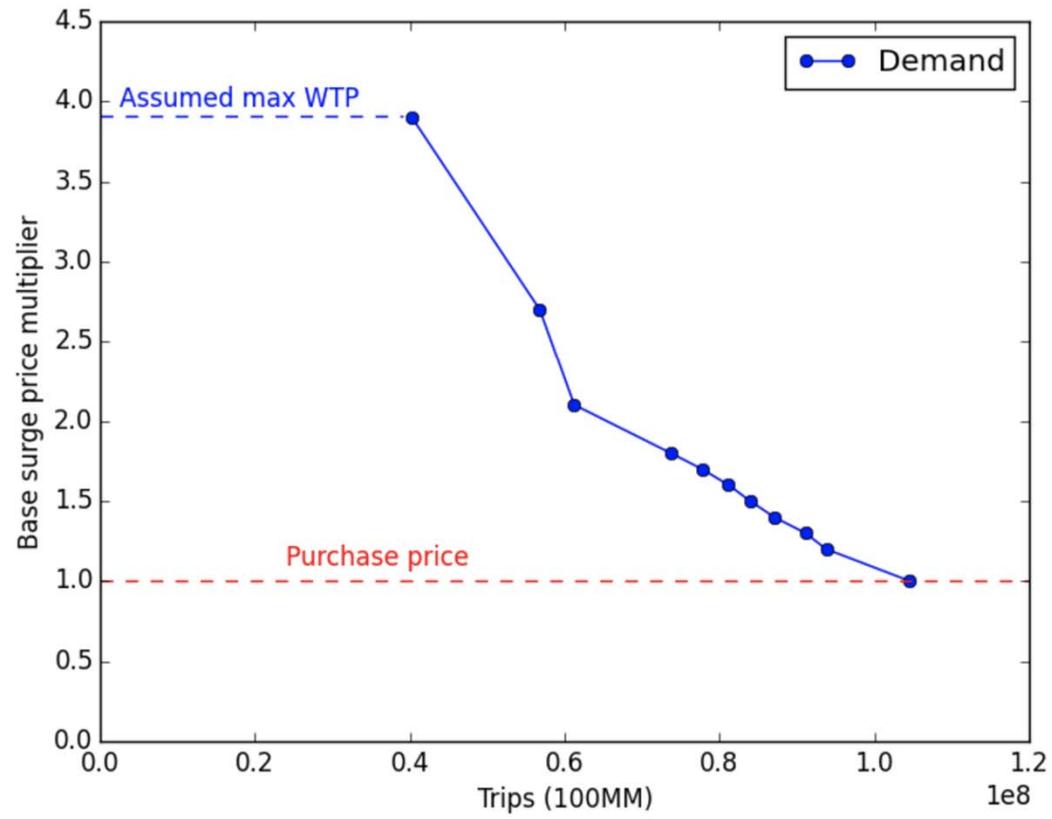


Figure 6: Visual representation of demand curve for transactions at 1.0x



“The findings reinforce our skepticism that Uber, and “gig work” more broadly, represent the “future of work.” Our results indicate that Uber drivers earn low wages and compensation and the total hours and compensation in the gig economy represent a very small share of total hours and compensation in the overall economy. These findings—and the fact that many Uber and other workers who provide personal services via a digital platform do so on a part-time basis primarily as a way to earn supplementary income—argue for a change in perspective. There has been much hype around Uber and the gig economy. But in our assessment, in any conference on the future of work, Uber and the gig economy deserve at most a workshop, not a plenary.” -Larry Mishel

Profit vs. Producer Surplus

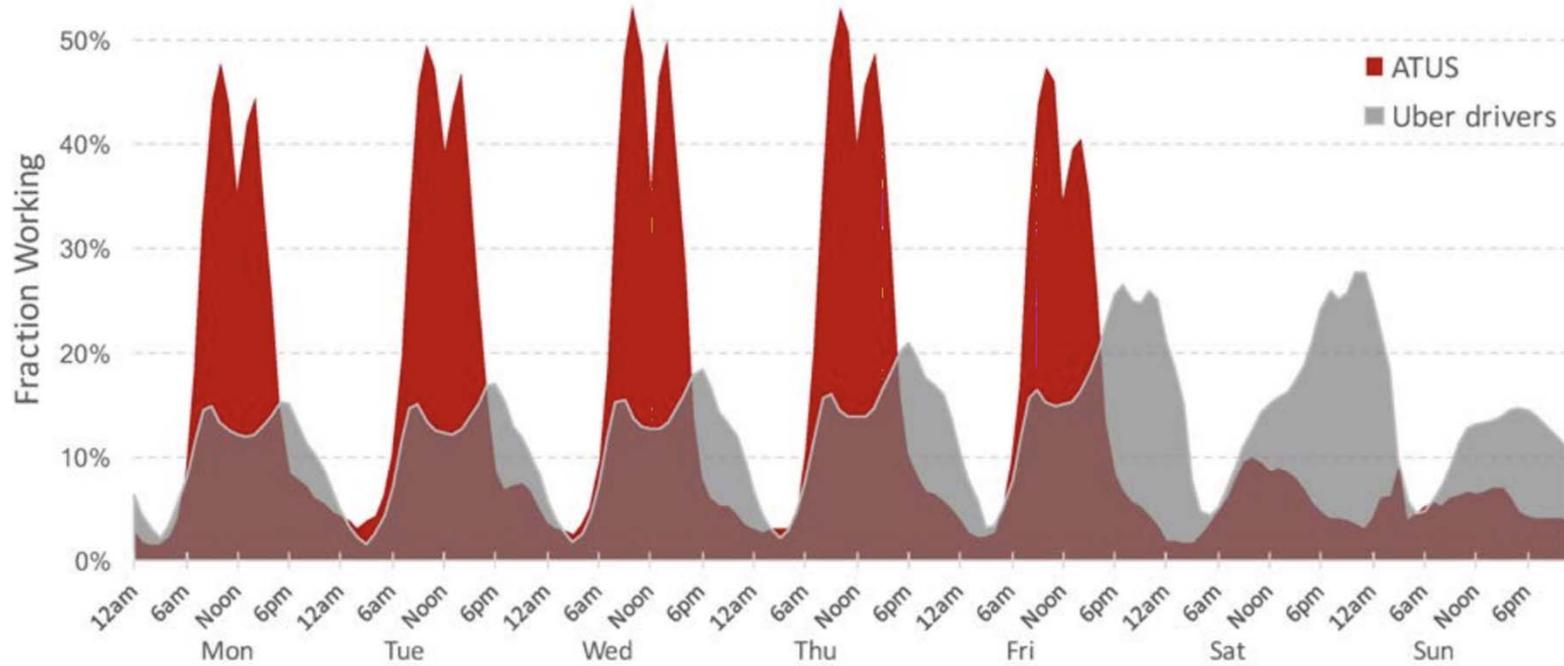


Fig. 1: Comparison of Uber Driver Activity to Workers in the American Time Use Survey

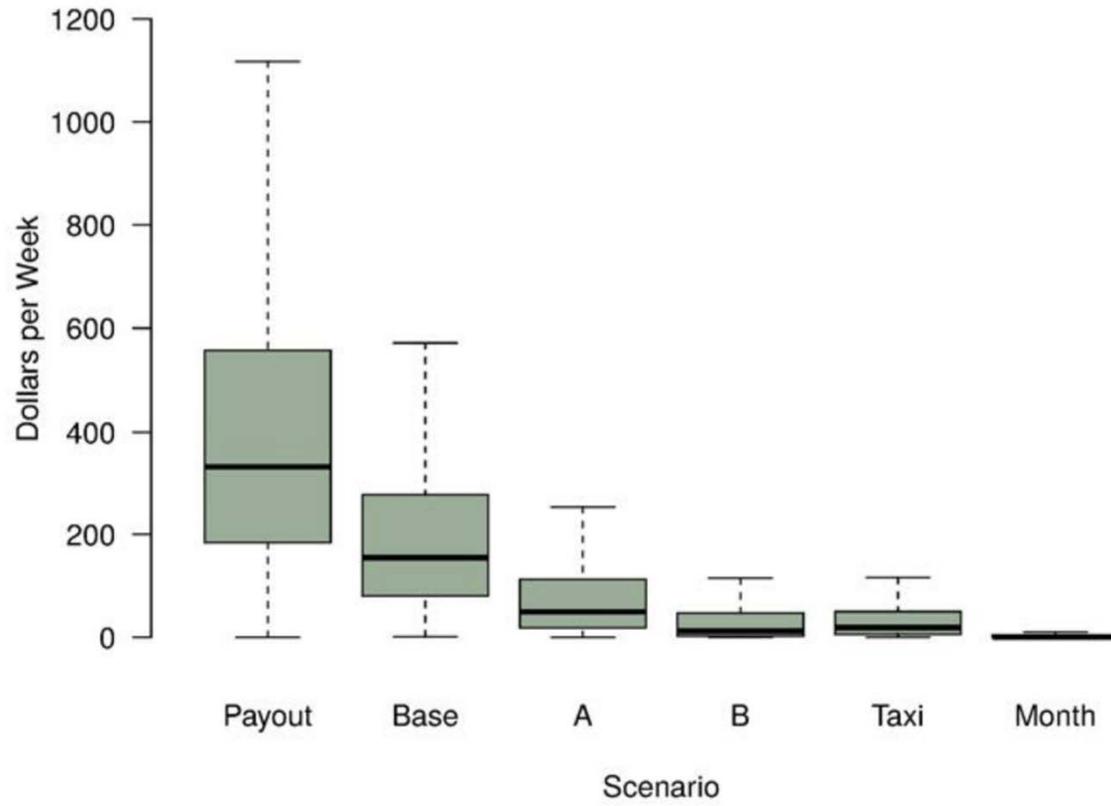


Fig. 12: Expected Labor Surplus

Figure 9: Distribution of Changes in Work Hours from Week to Week

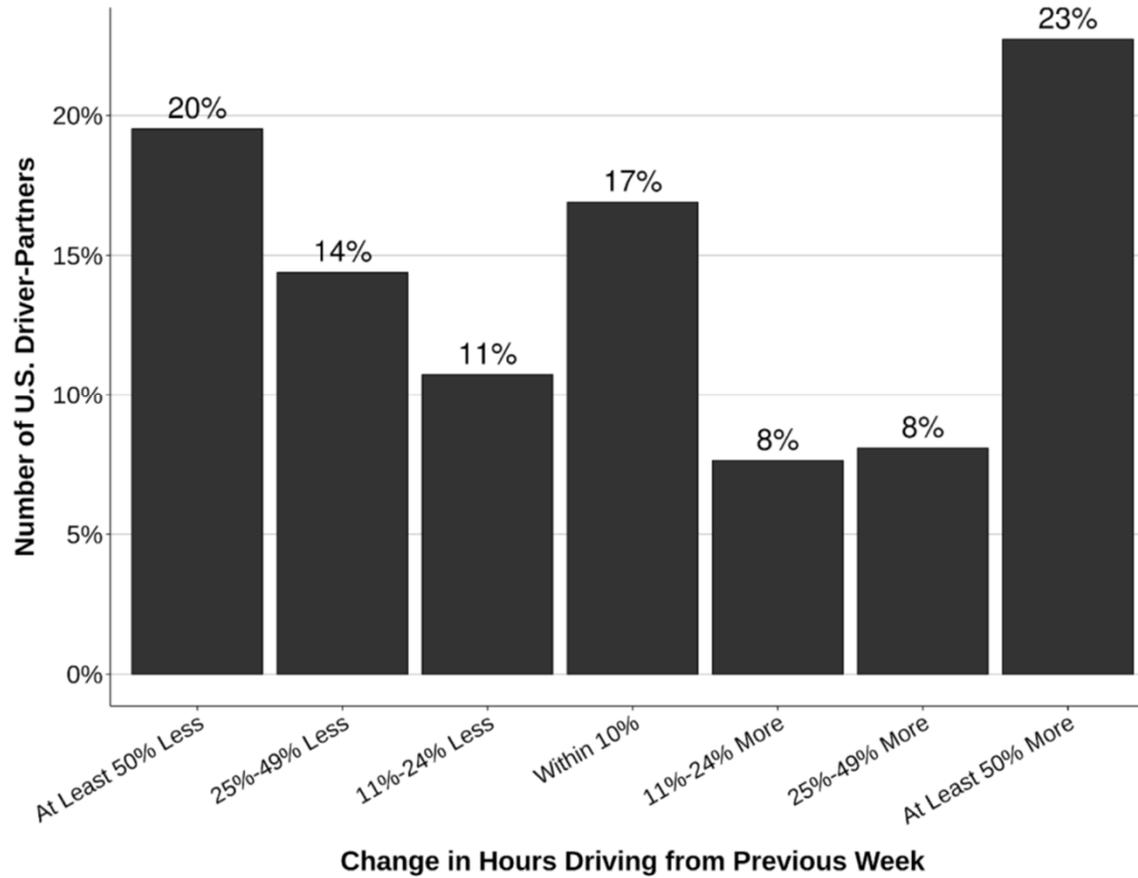


Table 7: Compensating Variation

Wage Gap	Weekly Lease Rates							
	\$50 (1)	\$100 (2)	\$150 (3)	\$200 (4)	\$400 (5)	\$600 (6)	\$800 (7)	Max Lease (8)
	A. Nominal Lease							
15%	-\$40	\$10	\$60	\$110	\$310	\$510	\$710	\$90
	-\$13	\$37	\$87	\$137	\$337	\$537	\$737	
	42%	66%	80%	89%	99%	100%	100%	
20%	-\$75	-\$25	\$25	\$75	\$275	\$475	\$675	\$125
	-\$38	\$12	\$62	\$112	\$312	\$512	\$712	
	33%	55%	69%	79%	97%	100%	100%	
25%	-\$113	-\$63	-\$13	\$37	\$237	\$437	\$637	\$163
	-\$65	-\$15	\$35	\$85	\$285	\$485	\$685	
	26%	46%	59%	70%	91%	98%	100%	
50%	-\$384	-\$334	-\$284	-\$234	-\$34	\$166	\$366	\$434
	-\$256	-\$206	-\$156	-\$106	\$94	\$294	\$494	
	10%	20%	29%	37%	59%	74%	83%	

Independent Work

Employees, almost by definition, are easier to measure



CURRENT TRIPS

WAYBILL

FIND TRIPS TOWARD



Set a destination
2 of 2 remaining today.



Figure 1: Average hourly earnings, US

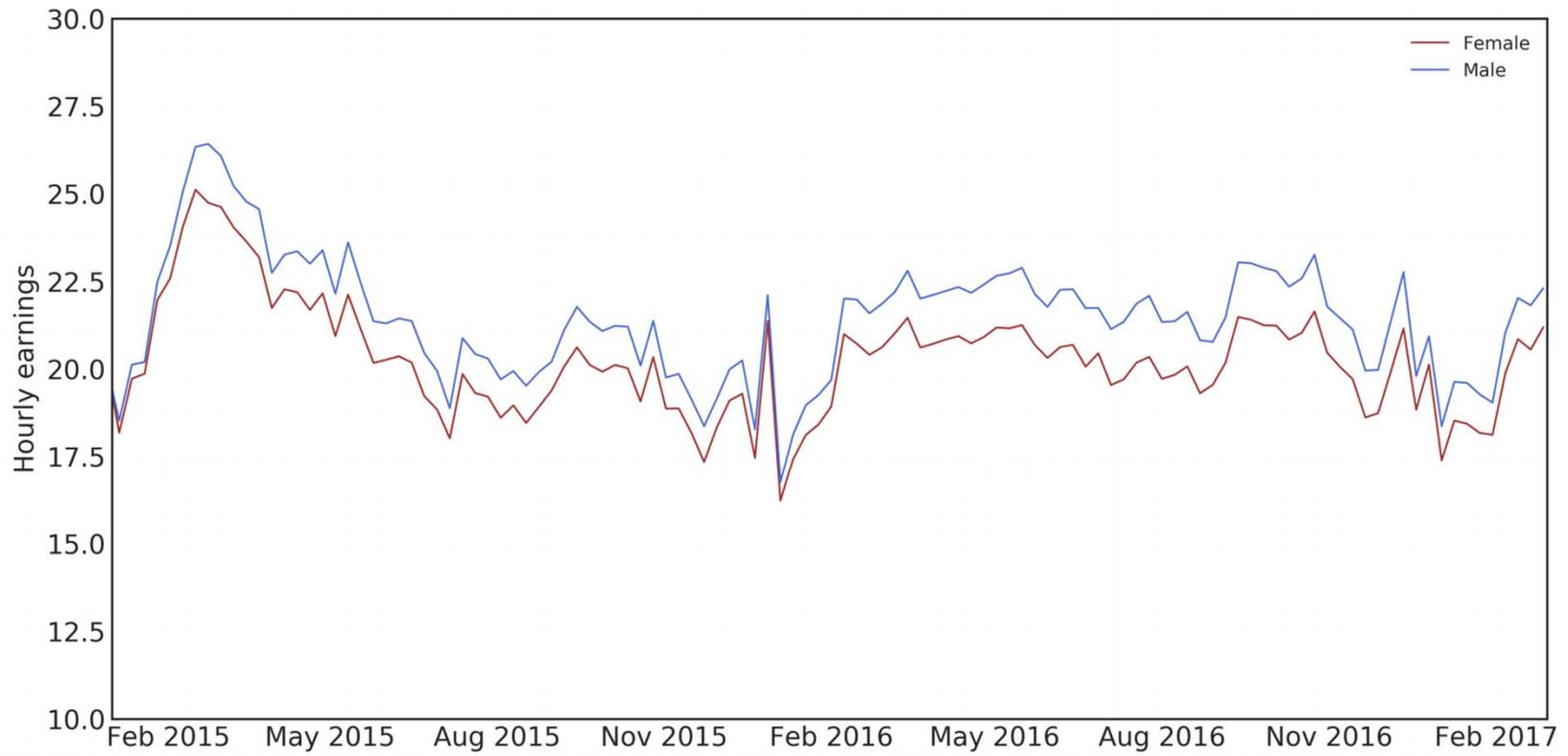
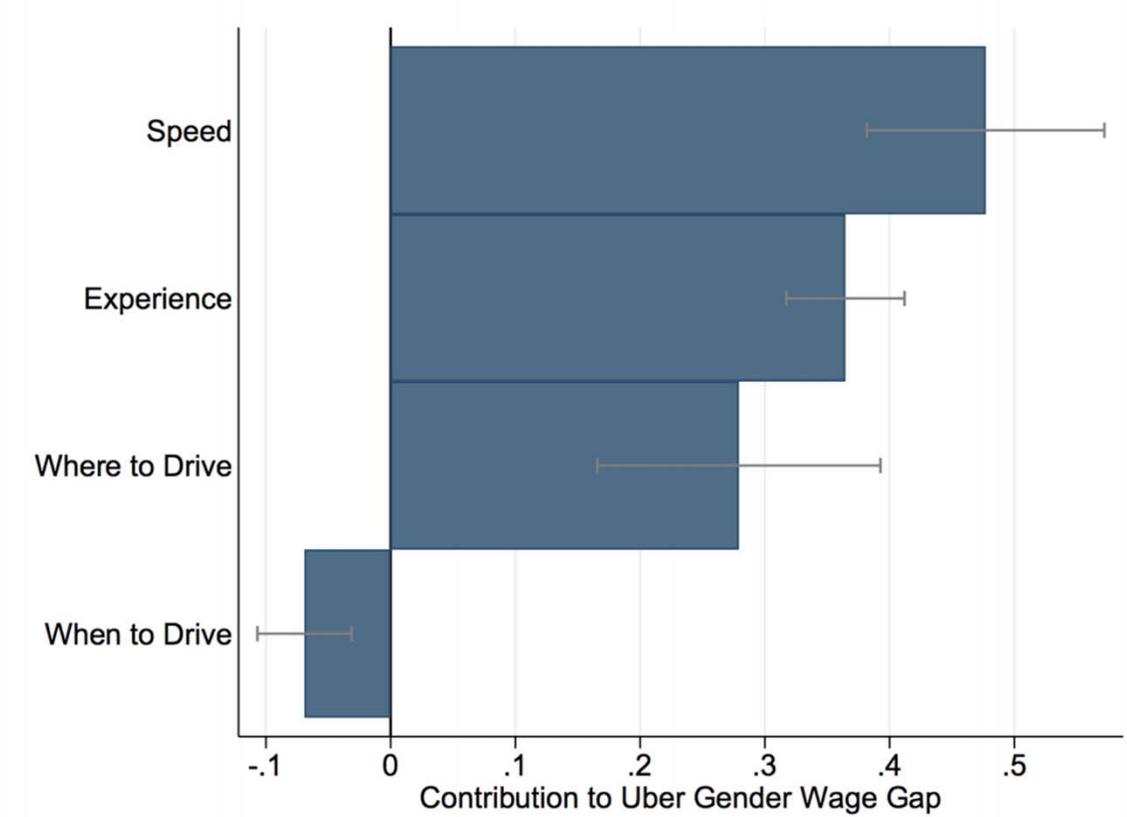


Figure 5: Gelbach decomposition



Thank You

Sources

- Hall and Kreuger, <https://drive.google.com/file/d/0B1s08BdVqCgrZWZkV0ZfZnhGUGc/view>
- Angrist, Coldwell and Hall, <http://economics.mit.edu/files/13947>
- Chen, Chevalier, Rossi; and Oehlsen, <https://drive.google.com/file/d/0B1s08BdVqCgrU084cVo2ZWJSUGM/view>
- Hall, Horton, and Knoepfle, http://john-joseph-horton.com/papers/uber_price.pdf
- Cohen et al, <http://www.datascienceassn.org/sites/default/files/Using%20Big%20Data%20to%20Estimate%20Consumer%20Surplus%20at%20Uber.pdf>
- Cook et al, <https://web.stanford.edu/~diamondr/UberPayGap.pdf>