

Online Appendix to Default Tips

Kareem Haggag and Giovanni Paci

A Passenger Information Monitor Screen Examples

Figure A.1: Passenger Information Monitors (PIM): Vendor (Top) & Competitor (Bottom)



Notes: The top and bottom rows present examples of screens from the Vendor and Competitor, respectively. The sequence of payment screens follows from left to right. The top row screens (Vendor) were taken from an NYC taxi driver training video uploaded to YouTube on October 22, 2010 (http://www.youtube.com/watch?v=VnciL_4g8CE). The bottom row screens (Competitor) were photographed by the authors in October 2012. The Competitor offered buttons of 20%, 25%, and 30% during the photographed period (2012); however, during the period of study (2009), the Competitor offered 15%, 20%, and 25% buttons.

Figure A.2: Vendor PIM Examples (above and below \$15)



Notes: The Vendor offered defaults of \$2/\$3/\$4 for amounts less than \$15 (left image) and defaults of 20%/25%/30% (computed on the fare) for fares greater than \$15 (right image). Images taken from an NYC taxi driver training video uploaded to YouTube on October 22, 2010 (http://www.youtube.com/watch?v=VnciL_4g8CE)

B Supplement to Section 2 (Regression Discontinuity)

We re-estimate regression specification (1), changing the outcome variable to ones that should not be significantly affected by the default suggestions. Table B.1 shows that the treatment effects are small and in conflicting directions for ride distance and duration, and the effects on passenger count, hour of the day, and day of the week are insignificant.

Table B.1: Regression discontinuity for trip distance, ride duration, hour of pick-up, day of the week, and passenger count

	(1)	(2)	(3)	(4)	(5)
	Distance	Duration	Hour of Pick-Up	Day of the Week	Passenger Count
$\mathbf{1}(Fare_r \geq 15)$	-0.015*** (0.005)	0.147*** (0.024)	-0.011 (0.012)	0.009 (0.009)	0.003 (0.002)
N	6,218,196	6,218,196	6,218,196	6,218,196	6,218,196
r2	0.884	0.780	0.378	0.059	0.901
DepVarMean	4.380	20.894	11.612	3.231	2.000

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: Robust standard errors clustered at each fare value (\$0.40 intervals), in parentheses. $\mathbf{1}(Fare_r \geq 15)$ is an indicator function that the fare is greater than or equal to \$15. Ride duration is constructed as the difference between the drop-off time and the pick-up time (in minutes). Trip distance is recorded in miles. *DepVarMean* is the mean of the dependent variable on rides with fares of \$14.90. All specifications include fixed effects for driver, pick-up day of the week, pick-up hour, pick-up location borough, and drop-off location borough. The sample is limited to fares between \$5 and \$25 on Vendor-equipped cab rides without tolls, taxes, or surcharges (January 1, 2009 - October 31, 2009; 6am - 4pm on Monday - Friday and 6am - 8pm on Saturday and Sunday).

Table B.2 shows heterogeneous treatment effects by the number of passengers in the taxi. We find similar effect sizes across the range of passenger count sub-samples.

Table B.2: Heterogeneity by Number of Passengers: Regression Discontinuity estimates of Default Effect on Tip Amount

	(1)	(2)	(3)	(4)
	One	Two	Three	Four
$\mathbb{1}(Fare_r \geq 15)$	0.299*** (0.006)	0.291*** (0.012)	0.267*** (0.024)	0.320*** (0.048)
N	3,911,666	851,301	241,251	85,977
r2	0.208	0.225	0.206	0.256
DepVarMean	2.206	2.251	2.284	2.249

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

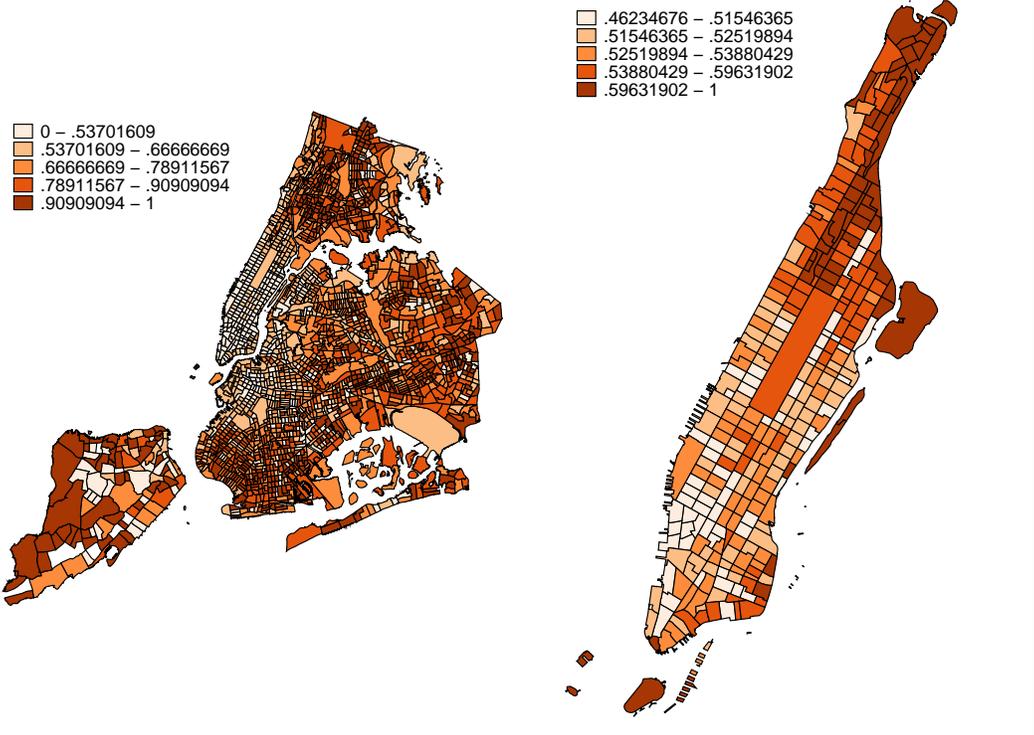
Notes: Robust standard errors clustered at each fare value (\$0.40 intervals), in parentheses. Columns (1) - (4) present the effect on tip amount by sub-samples of the number of passengers in the taxi. $\mathbb{1}(Fare_r \geq 15)$ is an indicator function that the fare is greater than or equal to \$15. *DepVarMean* is the mean of the dependent variable on rides with fares of \$14.90. All specifications include fixed effects for driver, pick-up day of the week, pick-up hour, pick-up location borough, and drop-off location borough. The sample is limited to fares between \$5 and \$25 on Vendor-equipped cab rides without tolls, taxes, or surcharges (January 1, 2009 - October 31, 2009; 6am - 4pm on Monday - Friday and 6am - 8pm on Saturday and Sunday)

C Supplement to Section 3 (Comparing Across Vendors)

Figure C.1 shows the proportion of pick-ups that were on Vendor-equipped (relative to Competitor-equipped) taxis, within each census tract in Manhattan and New York City more broadly.

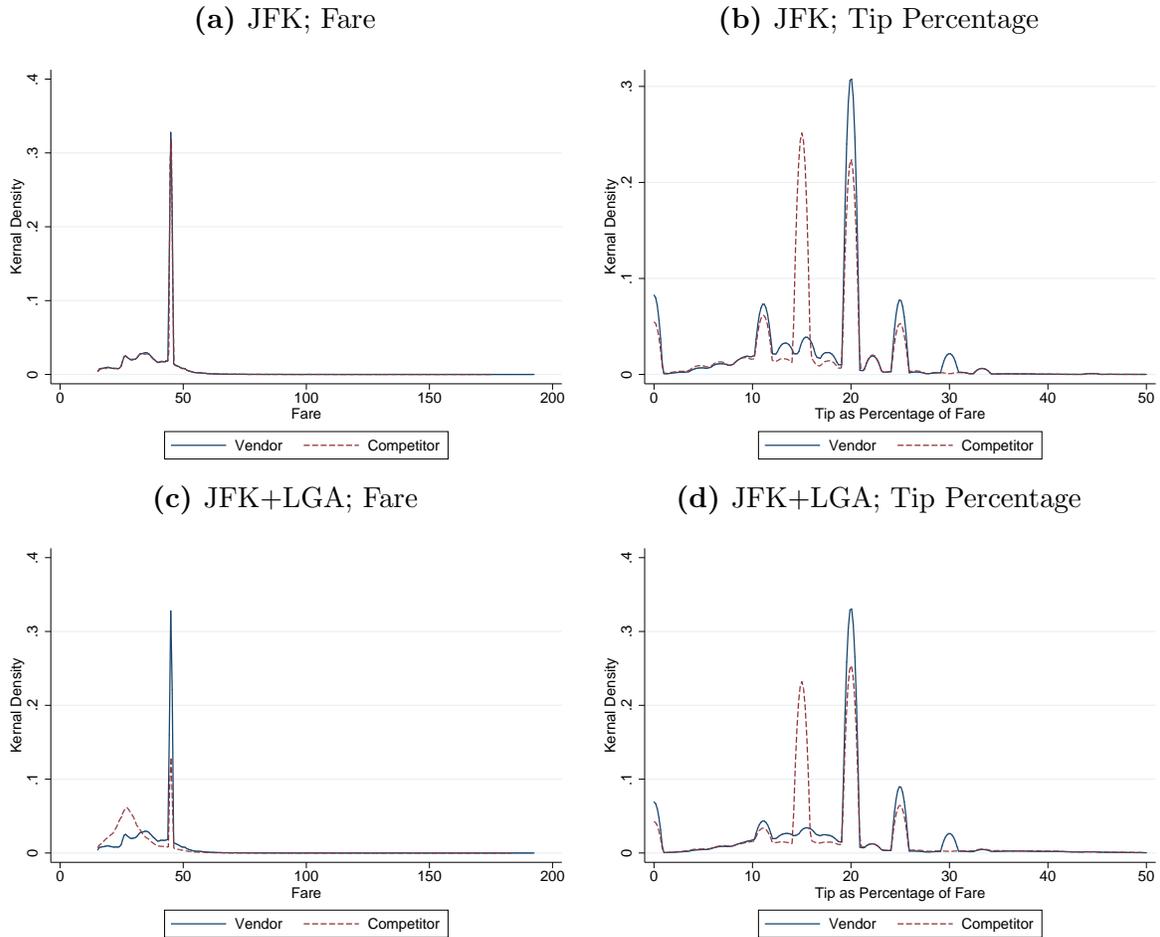
Figure C.2 is analogous to Figure 7 in the paper. The first row displays the Fare and Tip Percentage densities for the sample that limits rides that originate at JFK airport. The second row shows the pooled sample of rides originating at either LaGuardia or JFK airports. Finally, Table C.1 repeats Table 4 with this pooled sample of LGA and JFK rides, including a binary indicator for whether the ride originated at JFK.

Figure C.1: Proportion of Rides Originating with a Vendor versus a Competitor Equipped Cab, By census tract of Pick-Up Location



Notes: Graph on the left displays all of NYC, while the graph on the right displays only Manhattan. The sample is limited to fares between \$5 and \$25 on **Vendor-equipped** cab rides without tolls, taxes, or surcharges (January 1, 2009 - October 31, 2009; 6am - 4pm on Monday - Friday and 6am - 8pm on Saturday and Sunday).

Figure C.2: Distribution of Fares (A & C) and Tip Percentages (B & D) across Vendor and Competitor Equipped Taxis in JFK Sample (A & B) or JFK & LGA Sample (C & D)



Notes: The sample is limited to fares greater than \$15 on cab rides that originated at the census tract associated with JFK airport (Panels A & B) or those rides that originate at either the census tract associated with JFK airport or LaGuardia airport (Panels C & D), without tolls, taxes, or surcharges (January 1, 2009 - October 31, 2009; 6am - 4pm on Monday - Friday and 6am - 8pm on Saturday and Sunday). Panels B & D are limited to rides with tip percentages less than 50%.

Table C.1: OLS - Comparison of Vendor (20%/25%/30%) and Competitor (15%/20%/25%)

	Fare		Tip Percent		Default Tip		TipPercent0to10		Zero Tip		Tip25	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Vendor	0.419*** (0.060)	0.203* (0.122)	0.559*** (0.074)	0.593*** (0.176)	-0.102*** (0.003)	-0.092*** (0.010)	-0.003** (0.001)	-0.009** (0.004)	0.031*** (0.001)	0.028*** (0.004)	0.031*** (0.001)	0.033*** (0.005)
Pick-Up at JFK	15.368*** (0.036)	15.560*** (0.059)	-1.071*** (0.088)	-2.152*** (0.090)	-0.070*** (0.004)	-0.065*** (0.005)	-0.022*** (0.001)	-0.010*** (0.002)	-0.006*** (0.002)	0.012*** (0.002)	-0.018*** (0.002)	-0.015*** (0.003)
N	173,251	173,251	173,251	173,251	173,251	173,251	173,251	173,251	173,251	173,251	173,251	173,251
r2	0.364	0.586	0.003	0.195	0.013	0.156	0.001	0.140	0.004	0.139	0.003	0.143
MeanDepVar	31.669	31.669	17.590	17.590	0.621	0.621	0.064	0.064	0.047	0.047	0.073	0.073
Fixed Effects?		X		X		X		X		X		X
PVal_FEvsNoFE		0.000		0.000		0.180		0.000		0.000		0.322

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: Robust standard errors clustered at the driver level, in parentheses. Even columns include fixed effects for driver, pick-up hour, and drop-off borough. *Pick-Up at JFK* is a binary variable that takes on value 1 if the ride originated at JFK airport. The dependent variable in columns 5 and 6 (*Default Tip*) takes on value 1 if the customer selected one of the default tip suggestions (buttons). The dependent variable in columns 7 and 8 (*Tip Percent > 0 < 10*) takes on value 1 if the tip is greater than 0% and less than 10% of the fare. The dependent variable in columns 9 and 10 (*Zero Tip*) takes on value 1 if the customer left zero credit card tip. The dependent variable in columns 11 and 12 (*Tip Percent = 25*) takes on value 1 if the customer selected the 25% tip button. *DepVarMean* is the mean of the dependent variable in the control group (rides on Competitor-equipped cabs). *PVal_FEvsNoFE* is the p-value from a Chow Test for the equality of coefficients across even and odd columns. The sample is limited to fares greater than \$15 on cab rides that originated at the census tract associated with LaGuardia or John F. Kennedy Airports, without tolls, taxes, or surcharges (January 1, 2009 - October 31, 2009; 6am - 4pm on Monday - Friday and 6am - 8pm on Saturday and Sunday).