

I commend and appreciate the authors for once again taking the reviews seriously and completely overhauling the paper. At this point, I recognize that the authors have done the work of writing several papers, as well as writing detailed response letters.

At a high level, I'm happy with the claims of the paper, the streamlined theoretical section, and the connection between the theoretical and empirical sections.

The theoretical results are clean and make sense to me (and I appreciated the intuitive arguments after each statement). I think it's a nice result (and useful to show) that density economics decrease access in less dense areas, are worse for smaller platforms, and are only partially mitigated by optimal platform pricing/wages. The authors now show this for both supply and demand side density economics, as well as inter-region rides. I did not check proof details, though I'm at a high level convinced that the results are true from the discussion in the main text.

Empirical comments

My only remaining comments are regarding the robustness and correctness of the empirical results to the structural model being estimated. The authors in their theoretical modeling make several assumptions regarding the model (as is necessary for the results), such as regarding the relative values of the idle and pickup times, the functional form of customer response, and how area size translates to density. I would like some sense that the empirical results are robust to these choices and they do not affect the findings.

One way to do this is to show that the intermediate values calculated are reasonable:

1. Number of drivers as in (8) are derived from the model -- what are these numbers, and do they agree with external estimates with number of people who are active on Uber at any given time? (If such estimates are available)
2. What wait and idle times in each location (in minutes) induced by the calculation?

Of course, too many robustness checks are too much to ask for. The empirical simplifications that I think are most important to understand a bit more are:

1. As the authors discuss, the modeling assumes that trips do not take time. As far as I can tell, the empirical analysis uses average wages and prices per location without looking at trip length. Are there trip distribution differences across locations, and do they affect induced wages and prices and number of drivers as calculated by the model? For example, how much of Figure 3 is driven by variations in trip characteristics? Can this affect the results? I'd like a discussion on this.
2. Similarly, the model makes strong assumptions on how to calculate an area's density. Boroughs are spatially big and heterogeneous, as shown on the map; I would guess that the densest part of Queens behaves very differently than the less dense parts. Do the results extend if you instead use finer spatial grid, for example using census tracts? That would yield more precise relative inflows and outflows in each area, and less variation within each area.
3. How much of the results and strong conclusions depend on the response functions/elasticity of customers and drivers to prices and wages, and the functional forms on how more

drivers/customers affect pickup times? For example, (a) the paragraph starting with "There are a few interesting observations." on page 14, especially regarding relative value of price and wage levers. (b) the minimum wage results. How much do these depend on the functional response forms and other assumptions?

More minor question: In an earlier version of the paper (and the appendix), the authors compared Uber to Lyft and Via, to show how the results depend on platform density. Why does the current paper not do so, instead opting to study a counterfactual Uber that is 80% or 120% the size?