

“PRICE DISCRIMINATION, BACKHAUL PROBLEMS,
AND TRADE COSTS: THEORY AND EVIDENCE
FROM E-COMMERCE DELIVERY”
BY GE + HUANG + LIU + XU

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¹Any opinions and conclusions expressed herein are those of the authors and do not represent the views of the U.S. Census Bureau.

THIS PAPER

- Backhaul problem + Price discrimination in transportation
 - ▶ Incomplete pass-throughs of shipping costs on marginal transportation costs
 - ▶ \uparrow fixed transportation costs
 - ▶ Dampening of transportation-improving policies
- New amazing data from Cainiao
 - ▶ new stylized facts on backhaul

WHAT I LIKE

- A rationalization of trade imbalances within a country
- Observable fixed + marginal transportation fees!
 - ▶ provide a model that explains this pricing scheme
- the analytical results are super clean and neat
- clever use of the model
 - ▶ back out moments/equations \Rightarrow estimate/calibrate key parameters

WHAT ELSE

Things to check

- Quantities: is it just number of parcels? or is it number of products? or weight?
 - ▶ Is it possible to know what things are in each parcel?
- If not, is it possible to obtain the industrial composition of each location?
 - ▶ To check whether results are not driven by compositional effects

Institutional background

- I suspect backhaul problems are more of a problem with small transporters
 - ▶ Maybe not so much with big companies? \Rightarrow diversify their fleet size accordingly
 - ▶ Nevertheless, this is what the data is + model assumes a monopoly Chinese firm
- More institutional background would be useful to understand what happens in real life

WHAT ELSE

Trip-chaining

- No data on trip-chaining/economies scope in transportation
 - ▶ Maybe run $\log\left(\frac{p_{ij}}{p_{ji}}\right)$ on $Y_{ij} - Y_{ji}$, where $Y_{ij} = \sum_k d_{jk} X_{ik}$?

Pareto distribution

- Estimation can recover shapes and scales from Pareto dist. by location
- Shape parameters are well above 1
 - ▶ Goodness of fit of the Pareto?
 - ▶ Pareto gives neat analytical results, but maybe other ones?

GE

- Trade flows are estimated, not solved endogenously
 - ▶ They should respond to shipping prices and viceversa
- Build a GE version as simple as possible, and compare CF results