

Will the Rise of Ride Sharing Cause Increased Political Support for Urban Road Pricing?

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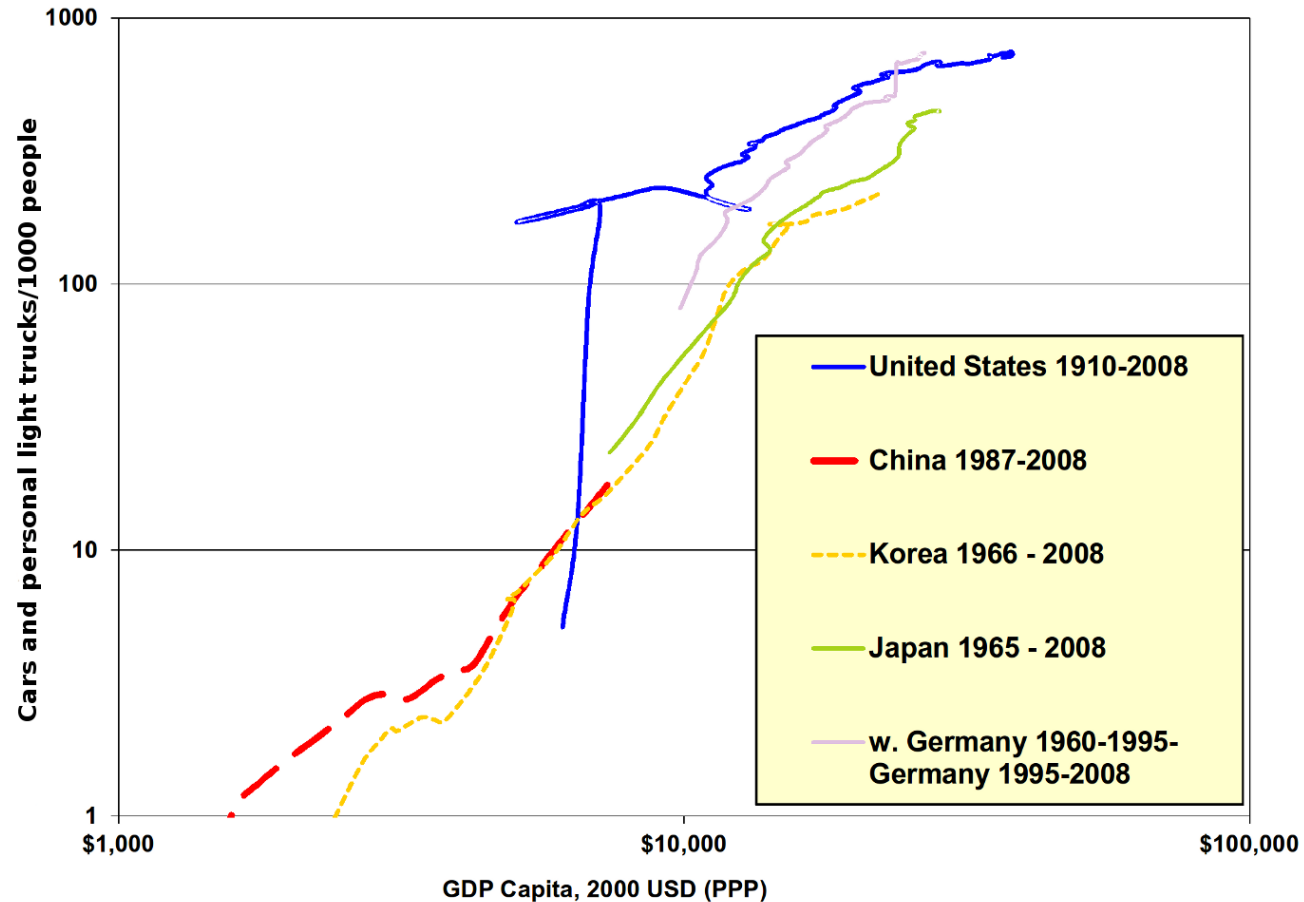
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Rising LDC Car Demand Will Increase Traffic Congestion

- LDC City population and per-capita income is growing
- The real price of quality adjusted new vehicles are falling
 - Li S, Xiao J, Liu Y. The price evolution in China's automobile market. *Journal of Economics & Management Strategy*. 2015 Oct;24(4):786-810.
- The supply of used vehicles is rising
 - Davis LW, Kahn ME. International trade in used vehicles: the environmental consequences of NAFTA. *American Economic Journal: Economic Policy*. 2010 Nov;2(4):58-82.
- Duranton and Turner --we cannot build our way out of traffic congestion
- **The Social Costs of Traffic congestion**
 - contributes to extra GHG emissions and local air pollution due to idling

Source: Ng WS, Schipper L, Chen Y. China motorization trends: New directions for crowded cities. Journal of Transport and Land Use. 2010 Dec 1;3(3):5-25.



Vehicle Count Dynamics Around the World

- China now has roughly 300 million vehicles
- Beijing has 5.6 million vehicles on its roads in 2015.
- In 1999, per 1000 people --- the U.S had 785 vehicles, China had 10 and India had 8.
- By 2017, per 1000 people --- the U.S has 910, China 154 and India at 50.

The Political Economy Challenge

- As urban traffic congestion grows worse and as the value of time rises due to rising wages and rising human capital, the social cost of congestion increases
- Road pricing (as demonstrated in Singapore) would allow for faster speeds and pricing the externality
- Road pricing has been rejected because the median voter prefers to pay for commuting using time rather than \$.

Uber Supports Road Pricing

- Earlier this month, Uber [threw its support](#) behind the Fix NYC congestion pricing plan proposed by Gov. Andrew Cuomo's task force. The ridesharing giant, which has [previously worked to stifle regulatory legislation](#) in elected bodies across the country, has joined forces with a group of advocacy organizations and unions to form a coalition to promote congestion pricing in New York state's 2019 budget.
- The plan, as announced in January, proposes a daily charge of \$11.52 for all passenger cars in Manhattan below 60th Street, and a \$2 to \$5 surcharge on every taxi and for-hire vehicle ride in a similar area.
- <https://www.cityandstateny.com/articles/policy/infrastructure/why-uber-favor-congestion-pricing.html> (March 2018)
- Is Uber “consistent” across the whole world in also supporting road pricing in LDC nations where it operates?

Three Reasons why Ride Sharing Will Increase Political Support for Road Pricing

- 1. Before Uber, driving services were provided by the household or by the government. Ride sharing “professionalizes” transportation. Congestion fee another cost such as gasoline.
- 2. Before ride sharing, car driving featured a large fixed cost. Uber and “Uber buses” sharply shrinks this fixed cost.
 - Glaeser EL, Kahn ME, Rappaport J. Why do the poor live in cities? The role of public transportation. *Journal of urban Economics*. 2008 Jan 1;63(1):1-24.
- 3. On Uber, the congestion charge is no longer as salient because it is part of the fare and the total bill for the ride just shows up on your credit card.
 - Sexton S. Automatic bill payment and salience effects: Evidence from electricity consumption. *Review of Economics and Statistics*. 2015 May 1;97(2):229-41.

The Median Voter's Support for Congestion Pricing if the Ride Sharing mode is available

- **Who is at the Margin?**
- Ride sharing lowers the fixed cost of commuting at higher speeds off peak (in the past, only private vehicles offered this option).
 - Glaeser EL, Kahn ME, Rappaport J. Why do the poor live in cities? The role of public transportation. *Journal of urban Economics*. 2008 Jan 1;63(1):1-24.
- Sufficient economies of scale for the fixed cost per person to decline at the peak when faced with a congestion charge per vehicle?
- If “yes”, the marginal supporter for road pricing will now be a lower wage person.
- Thus, greater aggregate political support for road pricing

Pooled Ride Sharing versus The Public Bus

- Ride Sharing and the Public Bus are not perfect substitutes
- The bus has a higher time fixed cost and moves at a lower speed
 - More stops along assigned routes
 - Last mile problem
- The ride sharing app can figure out the optimal pick up/drop off points to save time and increase average speed where to drop people off to reduce this
- Ride sharing's continuum of products convexifies the transport choice set in time, quality, and price space
- In contrast the bus offers a homogeneous service.

How Does the Public Transit Sector Respond to Ride Sharing Competition?

- If public transit loses its monopoly, does it compete by raising its quality?
- Public sector unions in the developing world
- Jerch R, Kahn ME, Li S. The efficiency of local government: The role of privatization and public sector unions. *Journal of Public Economics*. 2017 Oct 1;154:95-121.
- Or does a “death spiral” emerge as Average Fixed Costs get large?

Conclusion

- Pressure Group Competition as the externality is exacerbated by demand growth and a disruptive technology is introduced
 - Becker GS. A theory of competition among pressure groups for political influence. The quarterly journal of economics. 1983 Aug 1;98(3):371-400.
- The demand for speed in cities
- Do people have enough imagination to foresee how their quality of life will be affected?
- Implementing road pricing in developing countries? Engineering and governance issues, who keeps the tax revenue?

The Empirical Research Agenda

- Big Data and voting and revealed preference
- Who is at the margin? And how does this change over time as more people rely on ride sharing?
- Hårsman B, Quigley JM. Political and public acceptability of congestion pricing: Ideology and self-interest. *Journal of Policy Analysis and Management*. 2010 Sep;29(4):854-74.
- Börjesson M, Hamilton CJ, Näsman P, Papaix C. Factors driving public support for road congestion reduction policies: Congestion charging, free public transport and more roads in Stockholm, Helsinki and Lyon. *Transportation Research Part A: Policy and Practice*. 2015 Aug 1;78:452-62.