

The Dark Side of Technological Progress? Impact of E-Commerce on Employees at Brick-and-Mortar Retailers

(Chava et al. 2018)

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ABFER, May 2018

Background

- Retailers are closing brick-and-mortar stores, despite better economy
 - Often attributed to the growth of online shopping

Toys R Us says a 'perfect storm' killed the toy chain – and it blames Amazon, Walmart, and Target

Hayley Peterson and Shayanne Gal · Mar. 16, 2018, 10:04 AM · 8,514



FACEBOOK



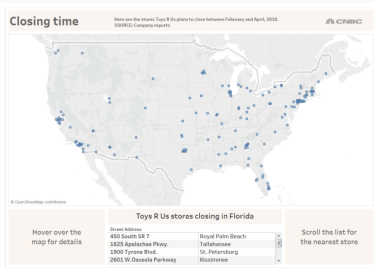
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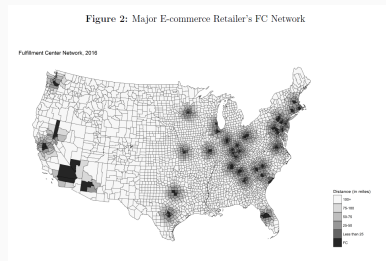
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Background



(a) Toys R Us

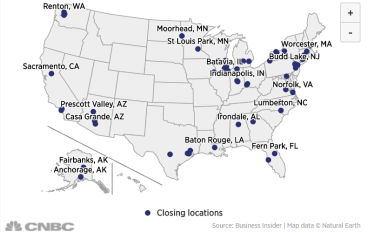


(b) Amazon

Background

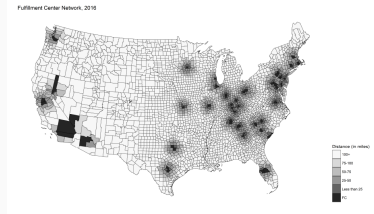
Out of the club

Dozens of Sam's Club locations will close across the U.S.



(c) Sam's Club

Figure 2: Major E-commerce Retailer's FC Network



(d) Amazon

Meanwhile in Singapore...



(e) :D

Amazon US ends free shipping to Singapore



File photo of the logo of web service Amazon on June 8, 2017. (Photo: Reuters/Carlos Jasso/illustration/File Photo)

(f) D:

- Amazon expands FC(Fulfillment Centers) - better services
- What is the effect of faster delivery on the retail workers?
- What is the effect of faster delivery on the retail business?

- Amazon's impact on retail workers
 - Credit bureau data
- Amazon's impact on retail business
 - Establishment level data, county level employment
- Standard diff-in-diff regressions
 - Detailed analysis and robustness tests through 17 tables

- Workers
 - Part-time, hourly, young & old workers most affected
 - Salaried, middle-aged worked less affected
- Businesses
 - Less sales, less employment, more exits, less entry
- Address concerns about confounding economic factors
 - Control for state-time trends - effect still exists
 - Look at full service restaurants - No effect

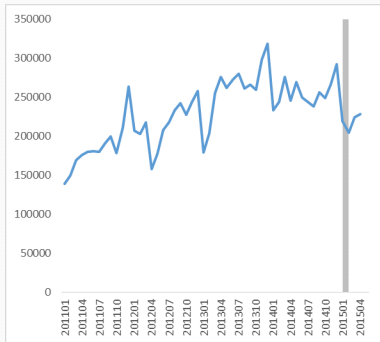
- Endogeneity of treatment
 - Amazon probably selects FC locations that have large markets with high sales growth - Cost reduction and customer satisfaction
 - Addressed in the paper by parallel trends on income, retail sales growth during 2000-2010
 - Why is there a parallel trend in income before treatment? If Amazon selects locations where it is growing, there could be some pre-trend, which can be accelerated by the FC
 - Maybe Amazon sales need to reach certain size before traditional retailers get in trouble - and this threshold could be correlated to when Amazon sets up FC
 - Use establishment level sales data to look at parallel trends within the sample period
 - A detailed analysis on why Amazon established a FC in each location at each time - timing of some locations may be more random than others

- Size of treatment effect
 - Salience of delivery time reduction to customers
 - What is the reduction in delivery time
- Change in wages for restaurant workers, both full-service and fastfood
- Hazard analysis for store exits

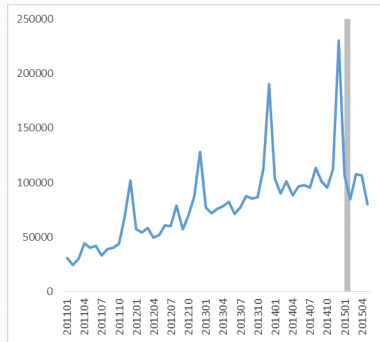
Looking at Customer Expenditures

- Using consumption-transaction data
 - Select three counties
 - Fulton GA, Hamilton TN, Hillsborough FL
 - Simple summation of expenditures at Walmart and Amazon for households living the the three counties
 - No adjustments

Fulton County, GA

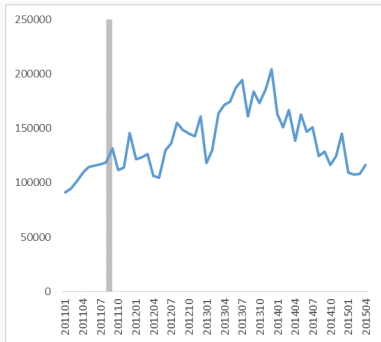


(g) Walmart

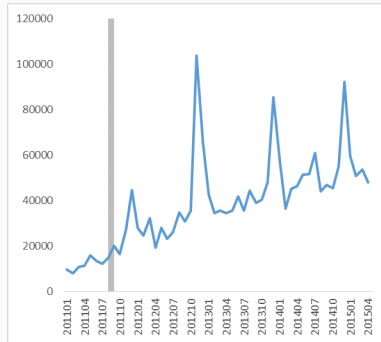


(h) Amazon

Hamilton County, TN

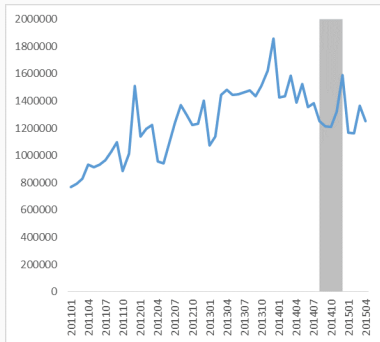


(i) Walmart

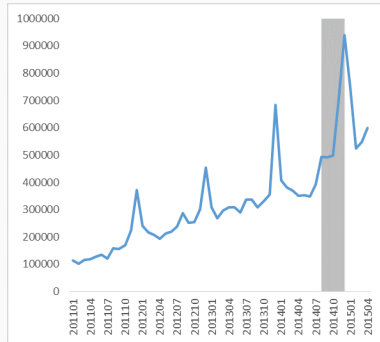


(j) Amazon

Hillsborough County, FL



(k) Walmart



(l) Amazon

Really interesting and very important paper!