Price Setting in Online Markets: Does IT Click?

Discussion of Gorodnichenko, Sheremiro, and **Talaver** by Eric Bartelsman¹

¹Vrije Universiteit Amsterdam, Tinbergen Institute, IZA

DNB Research Conference Amsterdam September 30, 2016

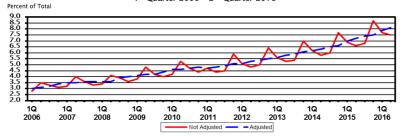
- The paper uses data from an online platform on individual daily prices
- Online prices behave qualitatively similar to offline prices
- Long periods without change (shorter than b&m; shorter when click-weighted)
- Sizeable magnitude of change when change does occur (smaller than b&m)
- Infrequent sales (with lower price reduction than b&m)
- Much cross-sectional dispersion (volatility is low) and little synchronization of price changes

- Rather than scraping (see 'Price setting in online markets') current paper has arrangement with platform to get access proprietary access
- Very broad in coverage, detailed id of product and seller (relatively short period)
- daily (good measures of change distribution, with fewer spurious near-zeros?)
- Main advantage: availability of clicks as quantity measure
- Disadvantage: proprietary. Still no transaction quantity

- Price dispersion and price volatility are distinct. From current paper we see much dispersion, but little volatility
- Dispersion does not seem to be a life cycle effect
- Very little reaction to predictable, high-frequency movements (or is Monday the day that webscrappers attack the site?)
- Lower frequency seasonal movements (black friday, xmas) with high clicks do show the expected price reduction

Figure : E-commerce share of retail sales

Estimated Quarterly U.S. Retail E-commerce Sales as a Percent of Total Quarterly Retail Sales: 1st Quarter 2006 - 2nd Quarter 2016



Source: US Bureau of Census

(日) (同) (三) (三)

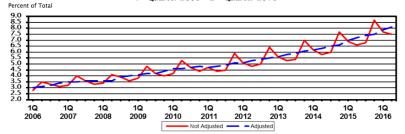
э

- The economy is changing, (e-commerce is part of it)
 - Disentangling price and quantity based on product 'characteristics' getting more difficult
 - Value chain delivers more than just the quantity of product
 - Customer heterogeneity across outlets/platforms/time
 - e.g. see stronger seasonals in ecommerce than b&m
 - Do changes in product quality have different monetary impact than process improvements of margin reductions?

- Can the ecommerce prices be used to forecast b&m prices? Time lag between 'event' and price change may be smaller online. Find 'events' and compare adjustment of online vs b&m
- More search for expensive goods. Is relation in online shopping different than b&m (behavioral)
- Do customers move towards lower price suppliers over time? (is pricing strategy based on building customer base/revenue rather than profit). Does click growth depend on location in price distribution.

Figure : Reallocation

Estimated Quarterly U.S. Retail E-commerce Sales as a Percent of Total Quarterly Retail Sales: 1st Quarter 2006 - 2nd Quarter 2016



Source: Bartelsman (2010)

э

イロト イ団ト イヨト イヨト