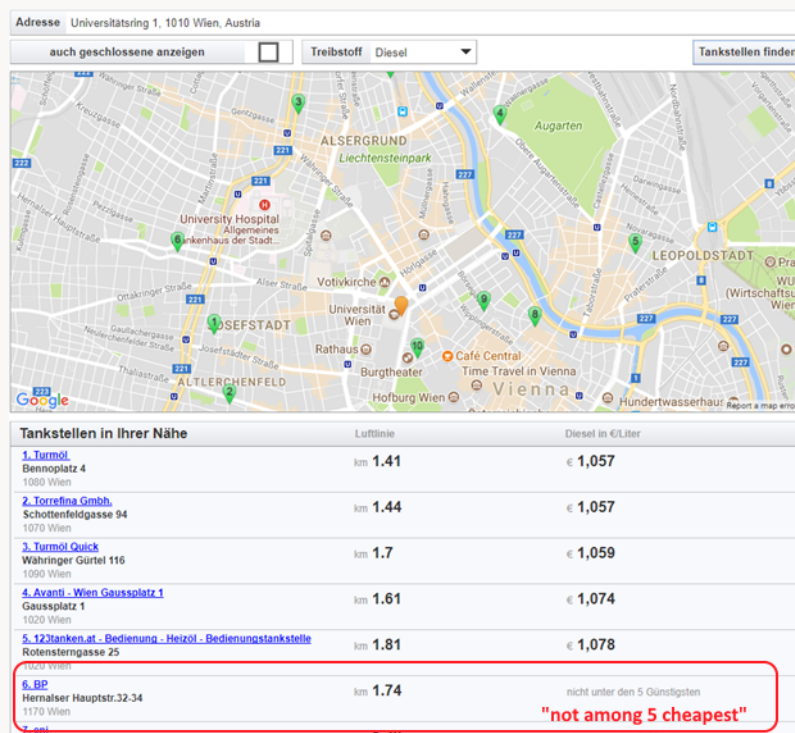


# Market Transparency and Consumer Search - Evidence from the German Retail Gasoline Market

## Motivation

- ▶ Market transparency: Important policy issue
- ▶ Government operated comparison websites
- ▶ Retail gasoline price comparison websites: Full transparency in Germany, but restricted transparency in Austria (by law!)



## Research question

- ▶ What are the effects of transparency in markets with information frictions?
- ▶ Counter-factual policy simulation: What is the effect on prices and consumer welfare by changing the transparency regime in Germany?

## Main results

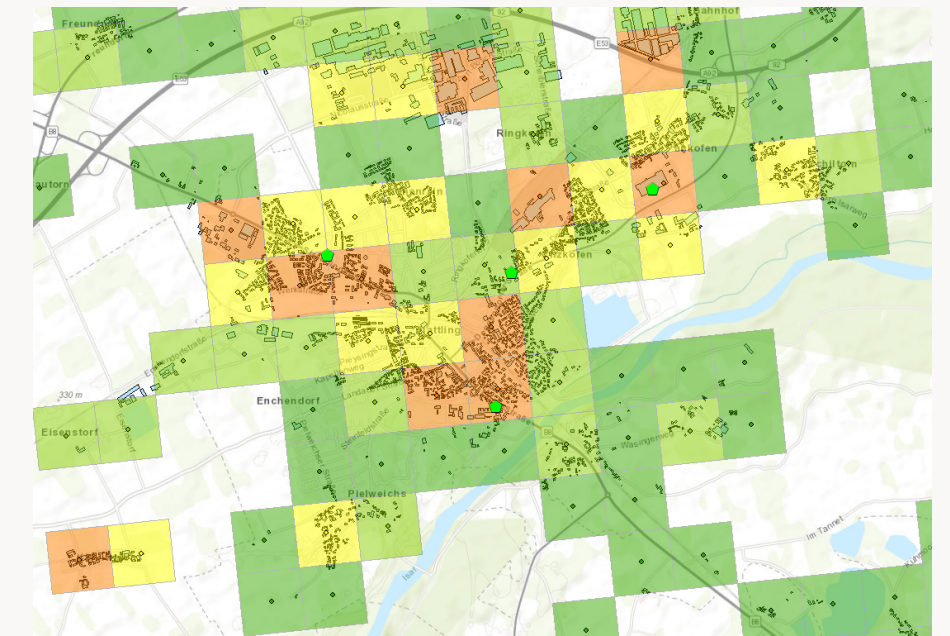
### Consumers can be better off with strictly less information (but not too little)

- ▶ Restricted transparency showing only first 20% of prices
  - Consumer expenditures decrease by 1.2%
  - Partially mitigated by inefficient matching
  - Consumer welfare increases by equivalent of 3.9% of firms' current margins
- ▶ More restrictive policies
  - Prices increase monotonically in transparency
  - Matching becomes even less efficient
  - $\Rightarrow$  consumer welfare is inverse u-shaped in transparency
- ▶ Framework that allows estimating discrete choice models with incomplete information using price data only

## Approach

- ▶ Model in spirit of Varian (1980) and Thomadsen (2005)
- ▶ Estimate structural model
  - Setting with horizontal and vertical differentiation, high volatility
  - Uninformed consumers and website consumers (discrete choice)
  - Transparency affects consideration set
  - No evidence for mixed strategies (Chandra and Tappata, 2011)
  - Game of incomplete information  $\Rightarrow$  uncertainty in prices and rankings
- ▶ Estimation
  - Flexible two-stage approach (similar to auctions or dynamic games)
  - Proxy for demand using buildings data

## Demand proxy: Buildings with grid cells



## Consumer welfare vs. transparency

