

# Market definition and recent empirical methods

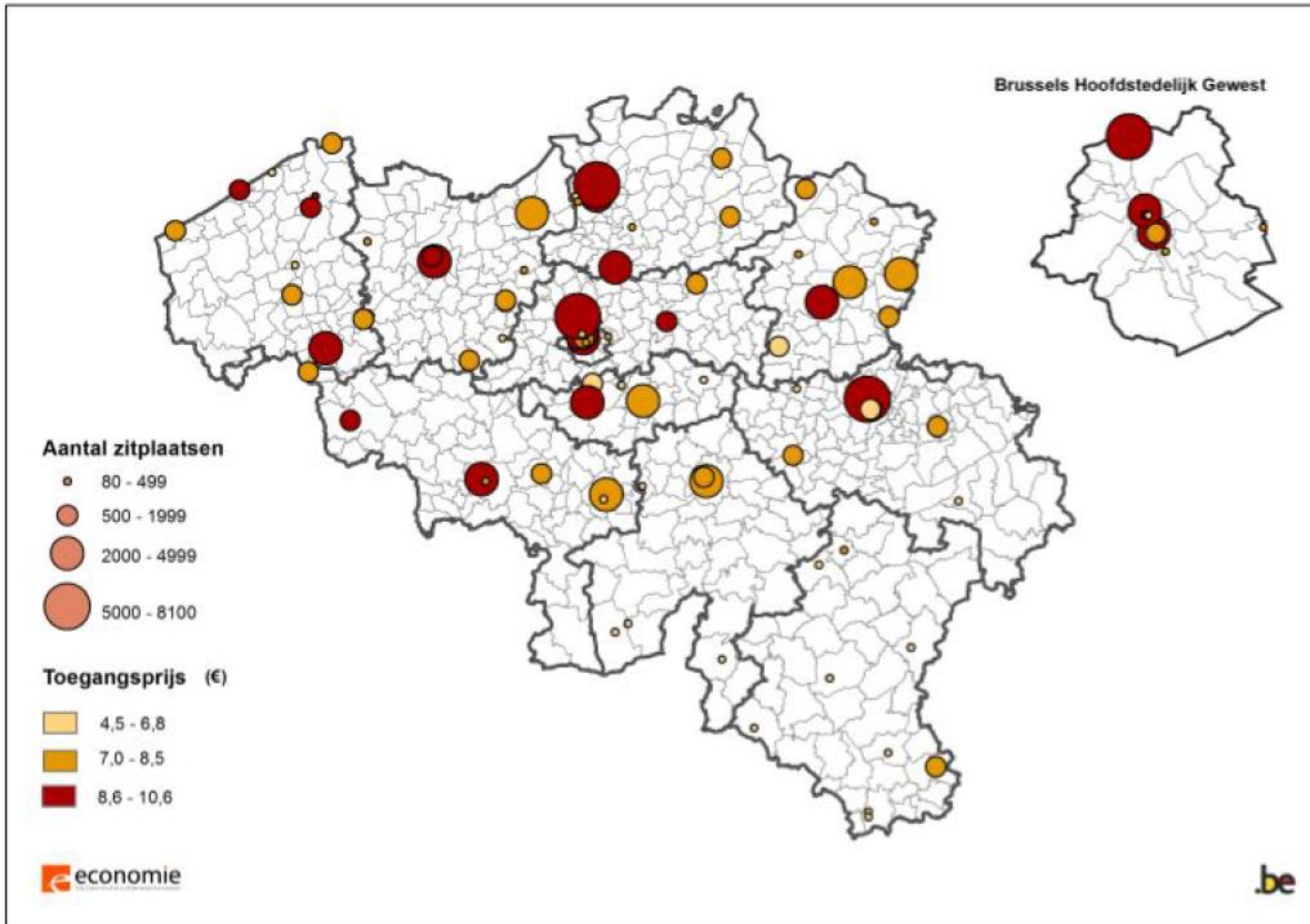
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# Merger between Kinopolis and Utopolis

- (Very) small case
  - Kinopolis: about 50% of the movie theatre market in Belgium
  - Utopolis: 4 movie theaters in Belgium (additional ones in the Netherlands)
- Application of Upward Pressure Pricing test (UPP-test)
- This case illustrates:
  - use of empirical methods
  - relationship of recent approaches with market definition

# Merger between Kinopolis and Utopolis



- Movie theaters located in or around the main cities
- Brussels, Antwerp, Liège: two main players, Kinopolis and UGC
- Ghent, Charleroi: one main player, Kinopolis or Cinépointcom
- Smaller cities: one player

# Merger between Kinopolis and Utopolis



- Red points: Utopolis theaters
- Blue points: Kinopolis theaters
- Green points: other theaters

- Available information: postcode survey per theatre
- Instead of computing market shares in concentric circles ...
- Estimate relationship between demand and distance between postcode and theater (logit choice model)

Distance	Visits/year
<2km	3.2
2–5km	1.7
5–10km	1.3
10–15km	1.2
15–20km	1.0

→ Strong declining impact of distance

# Estimating diversion ratios

- Diversion ratio is fraction of lost sales by A that flows back to partner B
  - For example, if A loses 100 and B gains 33, the diversion ratio is 33%
- Typically think of lost sales as being due to a price increase
  - Diversion ratio is then the ratio of cross-demand over own-demand effect
  - Requires (econometric) estimation of demand model
- Can also think of other reasons for lost sales, not due to the merger: increase in distance, elimination of a movie theater
  - Diversion ratio can be measured with “market shares” per postcode only!

$$D_{A \rightarrow B} = \frac{S_B}{1 - S_A}$$

- For example, if  $S_A$  and  $S_B$  are both 25%,  $D_{A \rightarrow B} = 33\%$ .
- Take suitably weighted average of this.
- Econometrics not necessarily required

# Diversion ratios and UPP analysis

- Diversion ratios from Utopolis to four Kinopolis movie theaters
  - Mechelen [10-15]% (most to Antwerp)
  - Aarschot [10-15]% (most to Leuven)
  - Lommel [5-10]% (most to Hasselt)
  - Turnhout [5-10]% (most to Antwerp)
  
  - Total [5-10]% (most to Antwerp)
- These diversion ratios (together with markups) imply there is no upward pricing pressure if one accepts 5% efficiency gains.

# Some points of discussion

- UPP versus UPP\*, GUPPI, CE, IPR, merger simulation → largely irrelevant
- What level of efficiencies is reasonable? → 5%? 10%?
- What is the size of the potential market?
  - Measure of potential market size required to compute “market shares”
  - Base scenario: potentially 6 visits per person per year
  - Sensitivity analysis with lower and higher numbers
  - Competition authority: market is saturated, close to actual number of 2 visits per person in 2016

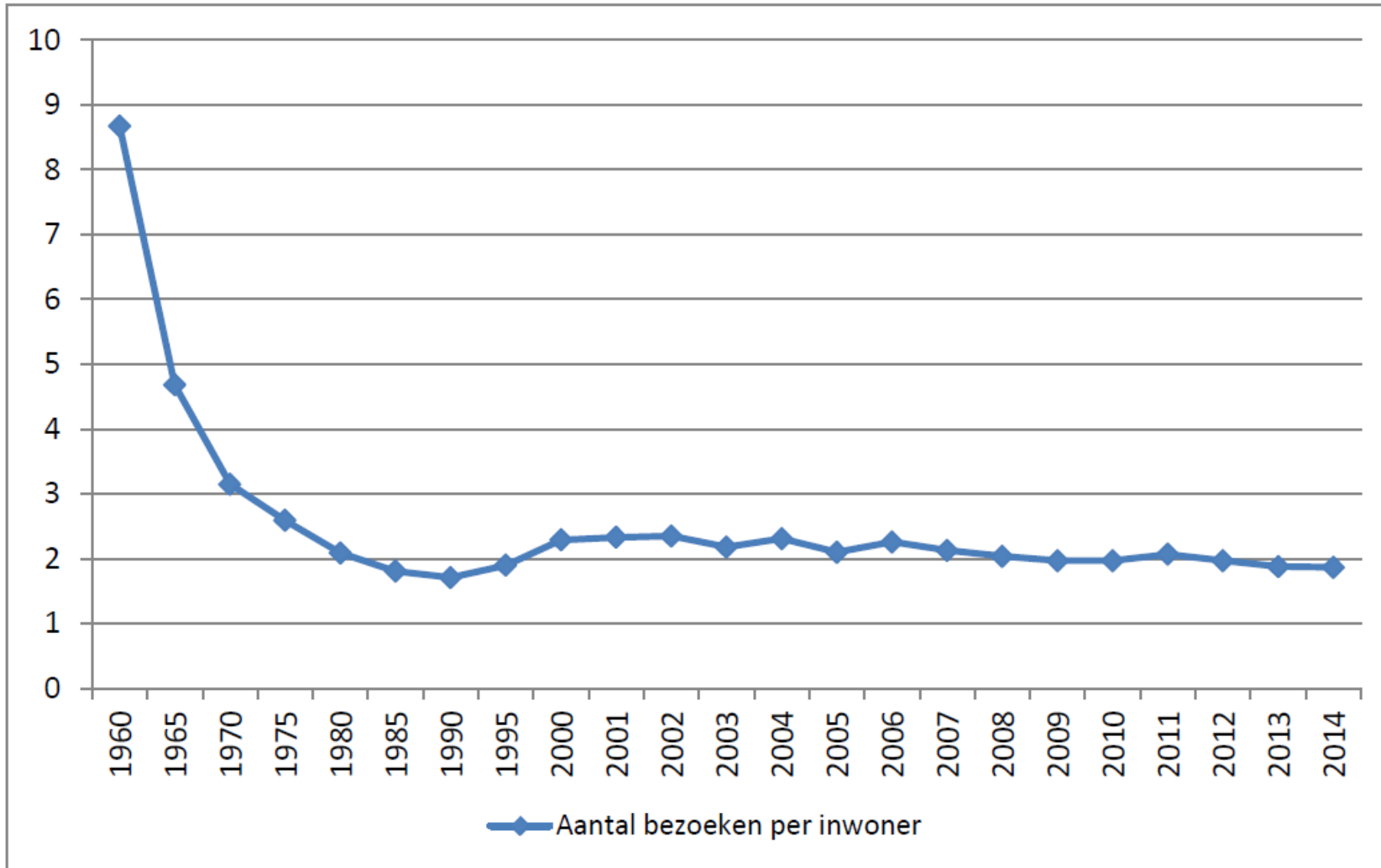
# Some points of discussion

- Discussion of potential market size corresponds to discussion of relevant product market
- Motivation for potentially 6 visits per year
  - Considerable excess capacity to absorb peak periods
  - Very high demand by consumers near a theatre
  - Before video and especially TV, there were 9 visits per year!
  - Elasticity of movie theater demand is high (about 2.5 or 3.0)



# Evolution of number of visitors: 1960 - 2014

Grafiek 2. Gemiddeld jaarlijks aantal bezoeken per inwoner



Year	Visits
1960	8.8
1970	3.1
1980	2.1
1990	1.8
2000	2.3
2010	2.0

# Market definition in merger analysis: some lessons

- In recent years a variety of “new” approaches
  - UPP, UPP\*, GUPPI, IPR, CE, ...
  - Merger simulation
- Advantages over market definition: more flexibility
  - Make underlying economic principles more precise
  - Enable to incorporate natural extensions: role of efficiencies, remedies, etc.
- But basic measurement aspects remain the same
  - Extent of competition between merging partners
  - Extent of competition from outsiders
- Sometimes rely on econometric methods, sometimes can rely on simpler approaches

# Market definition beyond merger analysis

- In merger analysis, alternative approaches to market definition have been developed
  - Offers more flexibility
  - Economic principles remain the same
- In dominance cases, traditional market definition based on SSNIP-test remains important
  - Need to think of increased flexibility depending on the situation
  - Telecommunications example: wholesale markets and indirect constraints

# Wholesale markets and indirect constraints

- In telecommunications, regulators still (must) rely on basic SSNIP-test for market definition
- This creates complications in wholesale broadband market definition
  - DSL incumbent is the only supplier
  - ISPs have no direct substitution possibilities to obtain access elsewhere
- Regulators (sometimes) accept theory of indirect constraints
  - DSL wholesale price increase leads to DSL retail price increase, and hence retail substitution to other technologies such as cable or mobile
  - This may reduce wholesale profits and call for broader market than DSL
- However, regulators should also account for reduction in retail profits if DSL supplier is vertically integrated in retail
  - This would make wholesale price increase even less profitable and more likely call for broader market definition