

Merger screening: Markets with differentiated products

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More Pros and Cons on Merger Control
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Background

- An international debate on the assessment of mergers
 - Should we shift focus from market definition and HHI to a competitive assessment?
 - Special concerns in markets for differentiated products?
- New approach included in merger guidelines
 - US horizontal merger guidelines August 2010
 - UK merger guidelines September 2010

The plan for the talk

- The traditional approach
 - When is the traditional procedure the right one?
- Markets with differentiated products
 - Diversion ratios and margins
 - New versus old approach
- From method to applications
 - How to measure diversion ratios?
 - An example from UK
 - An example from Norway
- Some concluding remarks

The traditional approach

The sequence of moves

1. Market definition
 - SSNIP test
2. Competitive assessment
 - Estimate market shares and HHI before and after
 - Discuss any possible countervailing competitive constraints
 - Expansion of existing producers?
 - Low barriers to entry?
 - Strong buyer power?
3. Efficiency defence
 - Cost savings that are passed on to consumers?

Point 1 is often decisive for the outcome!

Theoretical support for HHI?

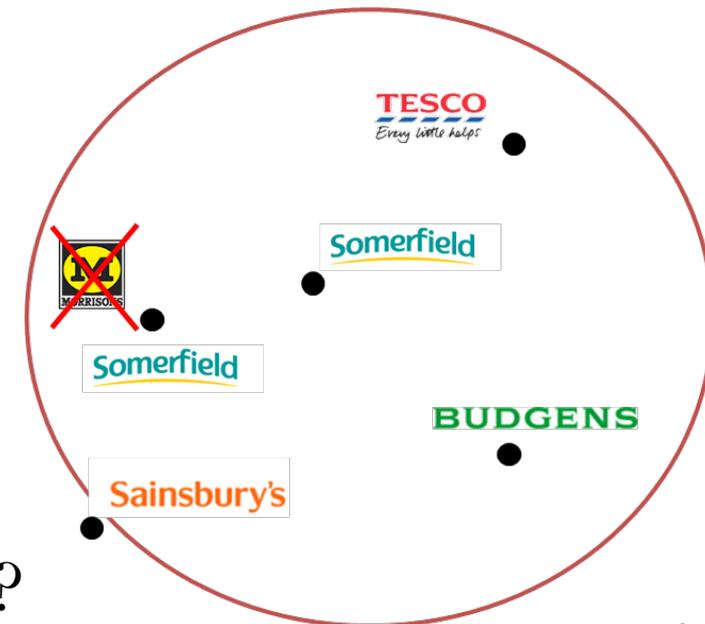
- *Number of firms* and *market shares* may matter
 - If identical products and Cournot competition, HHI a precise measure of the toughness of competition
- Even with identical products, there might be need for a specific analysis
 - Ex. 1: Electricity – pivotal producer?
 - Will the non-merging parties be needed for clearing the market (Residual Supply Index – RSI)?
 - Ex. 2: Auction – who merge?
 - Two ‘best’ bidders that merge?
- But such a *structural approach* not suited in markets with differentiated products

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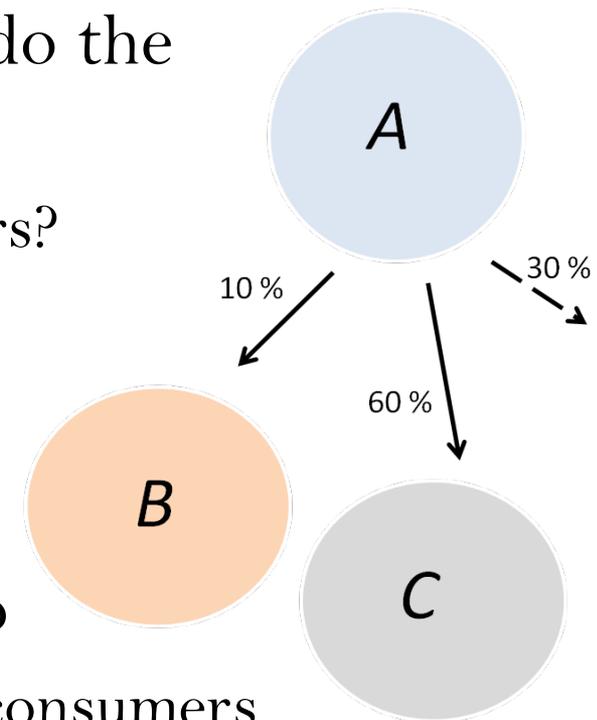
Example: A merger in UK grocery sector

- Traditional method in retail (UK/Norway)
 - Draw a circle (isochrone) to define the relevant market
 - Calculate market shares and HHI for merging parties
- But some obvious problems
 - Rather crude 0/1 definition of rivals (cf Sainsbury's)
 - Those stores differ in f.ex. product range
- Why not directly measure rivalry between Morrison and Somerfield?



The concept diversion ratios

- If higher price on product A, where do the consumers divert?
 - What is the second choice for consumers?
- Example of diversion ratios
 - 10 % will divert to product B
 - 60 % will divert to product C
- Large diversion ratio – large overlap
 - Then firms fight head-to-head to win consumers
 - Would shoppers at Morrisson have Somerfield as their second choice, and vice versa?
- The new approach a sound theoretical foundation

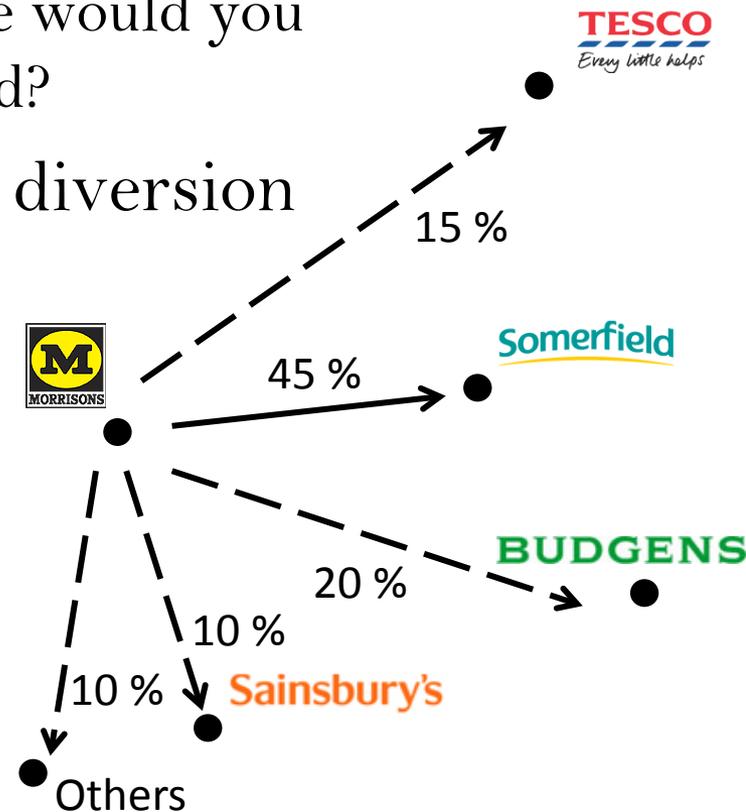


From theory to guidelines

- Theoretical foundation
 - Farrell and Shapiro (1990) (Cournot competition) and Werden (1996) (Bertrand competition)
- Applied on methods for market definition
 - O'Brien and Wickelgreen (2003) and Katz and Shapiro (2004)
- Applied on methods for merger screening
 - Farrell and Shapiro (2010); Upward Pricing Pressure
- Incorporated into guidelines in US and UK in 2010

Acquisition of Morrisson in 2005 in the UK

- Competition Commission in UK used a survey among shoppers to estimate diversion ratios
 - Shoppers outside Morrisson: Where would you have shopped if this store was closed?
- Anti-competitive concern if large diversion ratio to Somerfield
 - Somerfield would pick up much sales diverted from Morrisson
 - An upward pricing pressure on Morrisson store after merger
- But what is a 'large diversion ratio'?



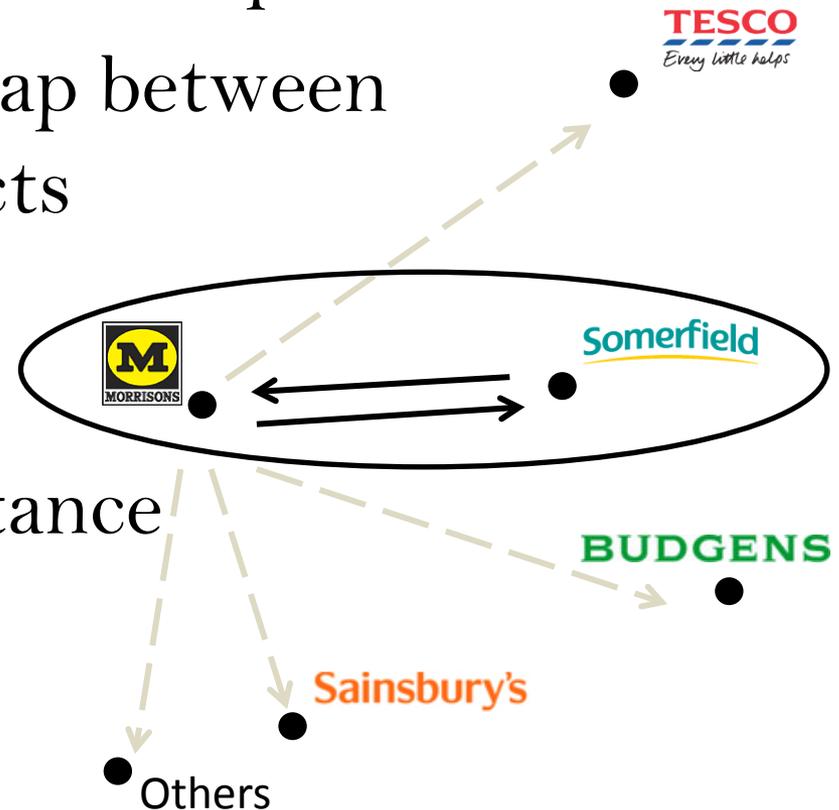
The information needed for merger screening

- Price pressure upward/downward?
 - Downward: Lower marginal costs
 - Upward: Large value of diverted sale
 - Large diversion ratio to other merging product
 - High margin on recaptured units
- An upward pricing pressure (UPP) if:

$$\underbrace{C_0 - C_M}_{\text{Efficiency}} < \underbrace{\underbrace{(P_0 - C_0)}_{\text{Margin}} \cdot \underbrace{D}_{\text{Diversion ratio}}}_{\text{Value of diverted sales}}$$

Old versus new approach

- Market shares no longer of importance
- Focus directly on overlap between merging parties products
 - Diversion ratios
 - Margins
- Other factors of importance in the final assessment
 - Efficiencies
 - Repositioning
 - Entry barriers



Incorporated into merger guidelines

- US merger guidelines August 2010:
 - *'The Agencies rely much more on **the value of diverted sales** than on the level of HHI for diagnosing unilateral price effects in markets with differentiated products'*
 - *'**Diversion ratios** between [merging firms' products] can be very informative for assessing unilateral price effects'*
- UK merger guidelines September 2010:
 - *'The combination of **diversion ratios** and gross profit **margins** can give a strong indication of unilateral effects. These two factors together help quantify the change in the merged firm's incentive to raise its prices or worsen its non-price offers.'*

Screening rules – simple formulas

- US: An upward pricing pressure (UPP) if

Diversion ratio $\rightarrow D > E \cdot \frac{1-L}{L}$

Relative price-cost margin (Lerner index) \leftarrow

Efficiency; standard deduction 10 %? \leftarrow

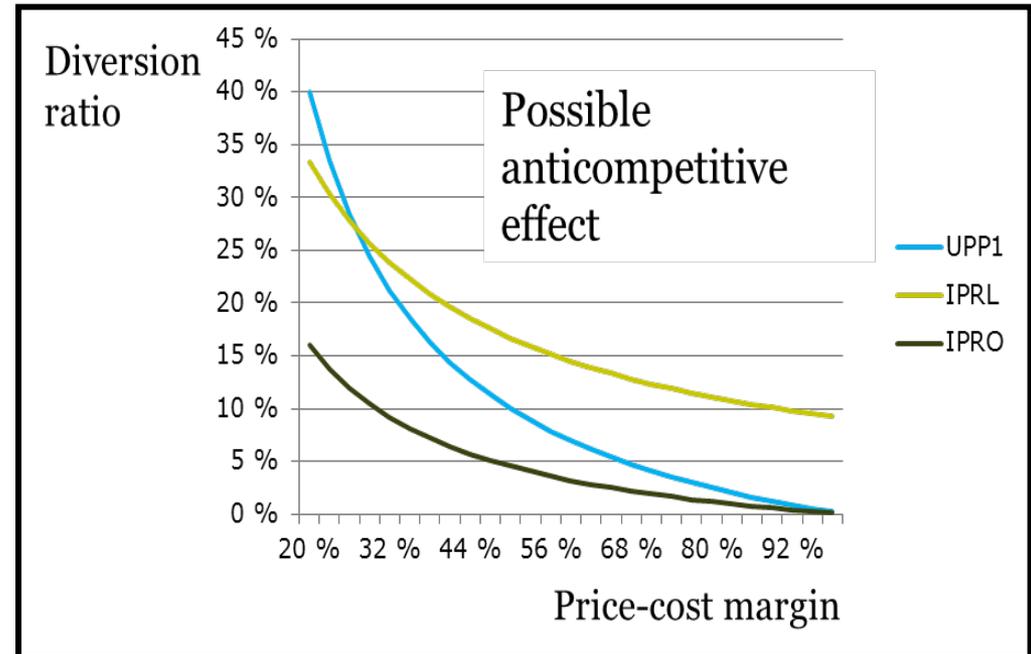
- UK: A price increase of 5 % or more?
- Demand curvature of importance when estimating Illustrative Price Rise (IPR):

- With linear demand (IPRL): $\rightarrow \Delta P = \frac{DL}{2(1-D)}$

- With isoelastic demand (IPRO): $\rightarrow \Delta P = \frac{DL}{1-D-L}$

Anti-competitive merger?

- Threshold levels with the simple formulas
 - UPP with 10 % efficiency gain
 - IPR with 5 % price increase



- Demand curvature of large importance in the UK test
- The role of the test differs
 - In US the intention to apply the test early on
 - In UK used in final merger assessment

Merger screening – early vs late in the process

- If merger screening early in the process, not such a serious problem with false positives
 - Not clearing mergers that should be cleared
 - Can be cleared later on, after further scrutiny
- But different for late merger screening
- Is the UK threshold level too restrictive, given that they apply it in the final investigation?
 - Especially if they apply formulas with isoelastic demand (as in for example Asda/Netto merger)

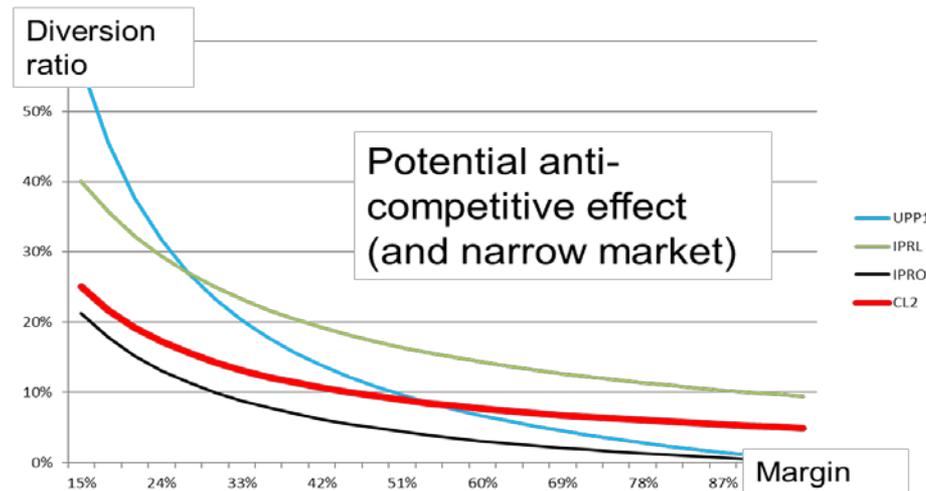
Is the new approach in fact new?

- **Critical Loss analysis (CL)** = SSNIP approach
 - Both margin and diversion ratio matters
 - Check whether a 5 % price increase is profitable for the hypothetical monopoly firm controlling A + B:

Price increase

$$D > \frac{\alpha}{\alpha + L}$$

- Same factors lead to
 - Narrow market
 - Anticompetitive effect



- The information needed for the proper SSNIP approach the same as for the new approach

The plan for the talk

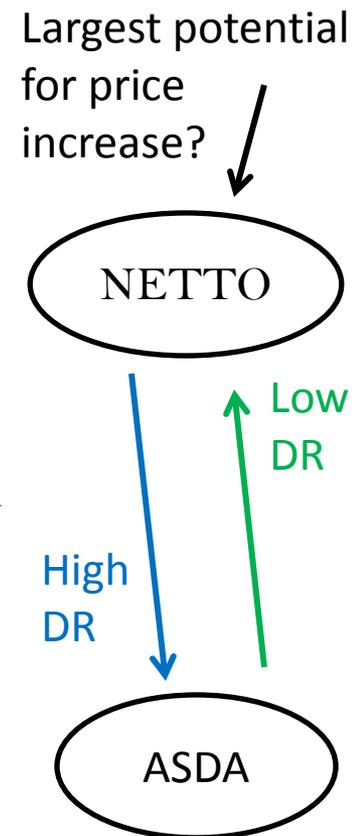
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Estimating diversion ratios

- Econometric study on detailed price-quantity data
 - Often difficult due to time constraints, lack of data etc
- Investigating a shock
 - Ex.: Capacity expansion or sales campaign
 - Can relate that to the formulas we have described
- Internal documents from merging parties
 - See Lovefilm/Amazon merger in UK
- Surveys among shoppers
 - To reveal their second choice
 - Used extensively in UK, and now also in Norway

UK grocery acquisition: Asda/Netto in 2010

- Surveys among shoppers to estimate diversion ratios
- OFT took into account asymmetries
 - Asda a strong competitive constraint on Netto
- First a three stage screening approach
 1. Counting number of non-merging local stores (fascia counting – isochrones)
 2. Survey outside Netto stores and symmetric IPR formula (can lead to false positives)
 3. Survey outside remaining Asda stores to estimate asymmetric IPR formula
 - Assumed isoelastic demand – false positives?
- Discussing efficiencies, repositioning and entry

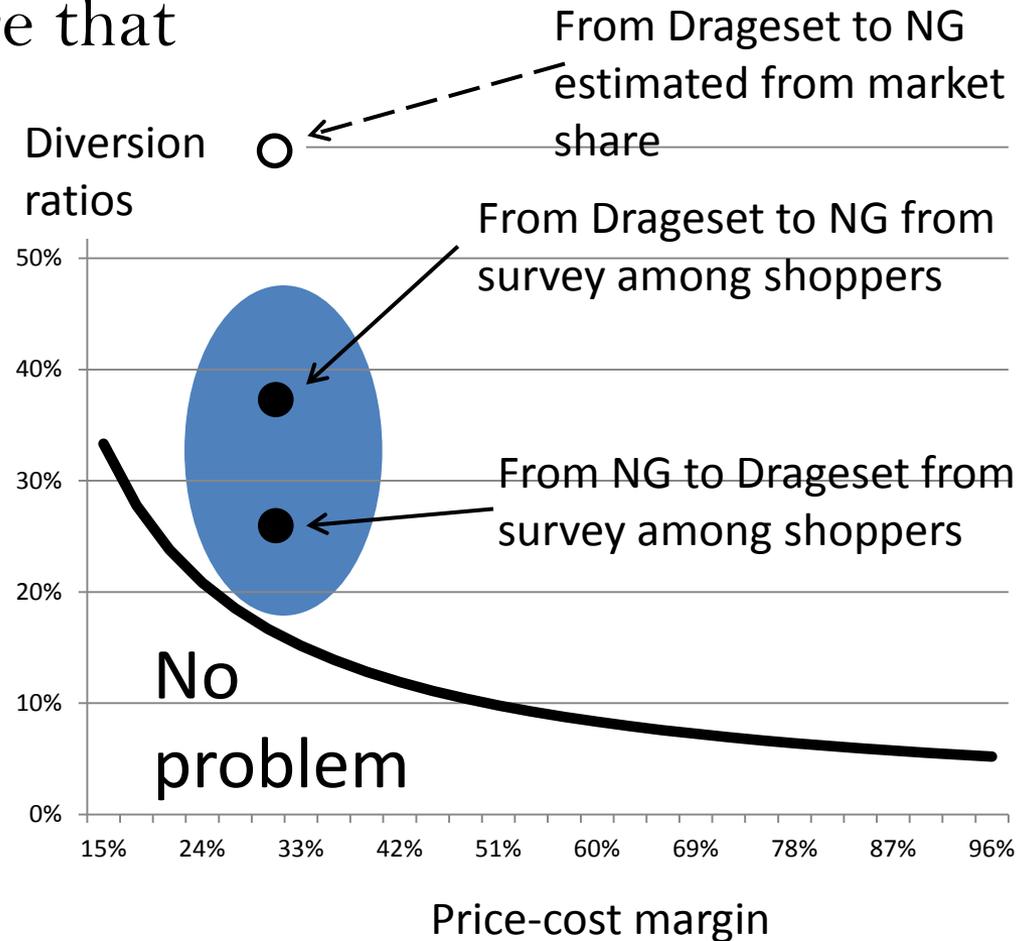


Norway: Drageset/NG groceries in 2008

- Acquisition in many local markets, but concern especially in one market
 - Based on market shares of merging parties
- A survey among shoppers outside 8 stores indicate market shares a bad proxy for competitive concern
 - Diversion ratios between merging parties much lower than we expect from market shares
- Merger simulation model from diversion ratios indicates problems both with old and new approach
 - Old: Price increases under/overestimated
 - New: The non-merging firms' response neglected

Drageset/NG acquisition cont.

- The acquired store located close to a non-merging store
- Diversion ratios capture that
- Other aspects..
 - Restrictions on local pricing
 - Potential for entry
- ... are arguments for clearance
- The acquisition was cleared



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Some concluding remarks

- New approach has a better theoretical foundation
 - Adoption of economic models into guidelines for agencies
 - Better foundation for the SSNIP test as well (CL analysis)
- It sends important signal to firms
 - Merger candidates should be concerned about diversion ratios and margins rather than market shares
- But a challenge to strike a good balance
 - Clarity and simplicity versus a precise test
 - Find the right threshold level; early on vs late
- Old approach supplements the new approach
 - Repositioning, buyer power, and entry still important