Economic approaches in merger reviews
Focus on market definition

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Outline

- Introduction

- Why defining markets in merger cases?

- Economic techniques used to define market

- The analysis of the closeness of competition between merging parties

From *per se* rules to an *effects-based* approach

- In the nineties, little reference to economic analysis was made in EC competition law

- But this has gradually changed:
    - 1997: Notice on market definition (SSNIP test)
    - Creation of the Chief economist team in 2003
    - 2004: Revision of the Merger Regulation (from *"creating or strengthening a dominant position"* to *"significantly impeding effective competition"*)
    - 2008: adoption of guidelines for non-horizontal mergers

Use of economic analysis in merger evaluation

- Economic analysis now often plays a key role in merger evaluation

- It is used in the preparation of the notification:
  - To define the relevant markets
  - To determine the likelihood of potential anticompetitive risks
  - To illustrate the resulting efficiencies
  - To design remedies

- It is also helpful during the notification process:
  - When addressing various demands of the competition authority
  - For competition authorities to assess the case
  - In meetings with the Case Team and Chief Economist Team
  - When negotiating remedies

Why defining markets in merger cases?

- **To estimate parties' market shares**

- **To assess the impact of the transaction on market concentration**
  - By measuring the HHI: for instance 10000 for a monopoly, 5000 for a symetric duopoly or 1000 when 10 firms have a respective market share of 10%

- **Various techniques are used:**
  - SSNIP (*Small but Significant Non-Transitory Increase in Price*) test based on simulation techniques
  - SSNIP based on critical loss analysis
  - Price analysis

Market definition - SSNIP test

- Underlying question: would a monopolist profitably impose a 5-10% price increase in the defined product market?
  - Examples:
    - Unprofitable 5% increase in price of matches => product market broader than matches
    - Profitable joint 5% increase of prices of matches and disposable lighters => product market composed of matches and disposable lighters

- The SSNIP test requires:
  - Pre-SSNIP margins
  - Post-SSNIP margins of the new entity
  - Volume of lost transactions following the price increase

- Simulations techniques may be used to estimate all these parameters

- Example (Unilever/Sara Lee):
  - Simulation techniques yield a conclusion that male and female deodorants could be considered as different markets

Estimating elasticities may help to implement the SSNIP

- Own-price elasticity – how much will the demand drop after one-percent price increase?

  - Example 1: low own-price elasticity for bread => market for bread only

  - Example 2: high own-price elasticity for one type of apples => the relevant market may include also other type of apples

- Cross-price elasticity - how much will the demand increase if the price of the competing product increases by 1%?

  - Example: high cross-price elasticity between oranges and mandarins => market for oranges and mandarins

- Elasticities may be combined with the actual data to implement the SSNIP

When the SSNIP test is infeasible, analyzing prices may allow defining the relevant markets

- Analyzing price movements - do the prices of the analyzed products move in the same way?

  – Price correlation test – are prices of analyzed products correlated?

  – Stationarity analysis – is the price ratio of candidate products oscillating around a constant value?

  – Possible objection:
    - Not a SSNIP test
    - These tests show that the observed pricing is consistent with close competition between analyzed products, but does not established it

- Observing price differences – are there any large differences in price levels of compared products?

  — Example: in Nestlé/Perrier, large price difference between mineral waters and soft drinks contributed to defining a separate market for mineral waters

Pricing analysis in Arjowiggins/M-real Zanders Reflex

- Product market: carbonless paper sold in reels or sheets

- Analyzed question: is the geographical market EEA-wide?

- Arguments against the EEA-wide definition:

  – Varying presence of the different competitors in the different parts of the EEA

- Arguments for the EEA-wide definition:

  – Centralized manufacturing

  – The existence of European/world-wide brands

  – Limited transport costs

  – High levels of import and export within the EEA

Pricing analysis in Arjowiggins/M-real Zanders Reflex

- **Correlation analysis yielded mixed evidence regarding the EEA-dimension of the market:**

  – Prices of sheets do not move together suggesting national markets

  – Prices of reels move together in France, Poland and Italy, are somewhat less correlated in Germany and are systematically different in the United Kingdom.

  – However, identified price correlations for reels may be due to cost factors (for example paper pulp).

- **Stanionarity analysis found no evidence pointing towards EEA-wide markets:**

  – No stable long-run relationship between prices in different countries

  – Hence, no evidence that the "law of one price" holds across the different geographic markets for both reels and sheets

Which approach to the market definition to choose?

- **The choice of the implementation method may depend on:**
  - the data availability
    - Elasticities may be known from the existing economic studies.
    - Diversion rates may be available from parties' internal documents (e.g. % of the lost sales when a competing supermarket opened in the neighborhood)
  - the time constraints
    - Some methods (e.g. estimating price elasticities) may take more time than others (e.g. running simple correlation tests)
    - In a given context some data may be more easily collected than other data
  - the client engagement
    - Some methods may be implemented with the public data
    - Some methods may require the client data

- **Several methods may be sometimes used to define the relevant markets**

Why measure of the closeness of competition between the two merging parties?

- The market share may not measure well the level of the effective competition

- This is the case:
  - In differentiated markets
  - In bidding markets

- Diversion rates (switching frequency)
  - e.g. how many customers would switch from product A to after a price increase implemented by A?

- Identification of pricing constraints
  - Parties' price levels - are the parties listed among the cheapest suppliers?
  - Price correlations - to what extent prices employed by the parties are correlated?

Economic analyses assessing closeness of competition

- Example in differentiated markets:

  – 4 supermarkets belonging to the same market with a similar turn-over

  – If two supermarkets merge, they will have a market share of 50% irrespective of the supermarket identity

  – The HHI will be the same

  – But a merger between A and B, which are closer, should have more unilateral effects than a merger between A & D
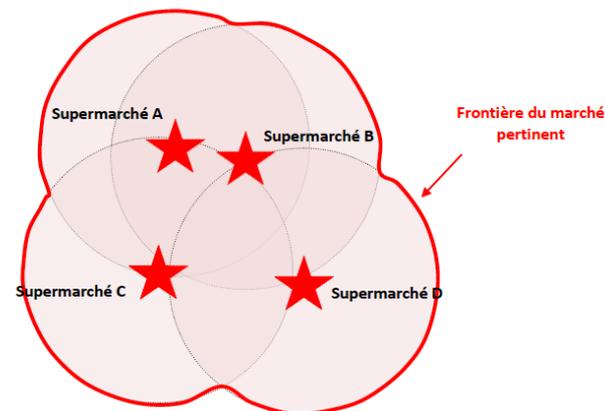
Economic analysis of closeness of competition in bidding markets

- Analysis of bidding participation data

  - e.g. how often did the merging parties bid for the same construction projects?

- Analysis of the pre-selection data

  - e.g. how often were the merging parties shortlisted for the same IT projects?

- Evaluation of bidding results

  - e.g. how often the merging parties submitted the most advantageous bids in tenders for specialized industrial equipment?

- Example - Syniverse/BSG (merger in the GSM data clearing market):

  - The parties were never the only two bidders in a tender

  - The parties very rarely both the winner and the runner-up in the same tender

  - Prices offered by BSG were unaffected by whether or not Syniverse participated in a tender