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The Interplay of Law and Economics after Ten Years of the Effects-Based Approach

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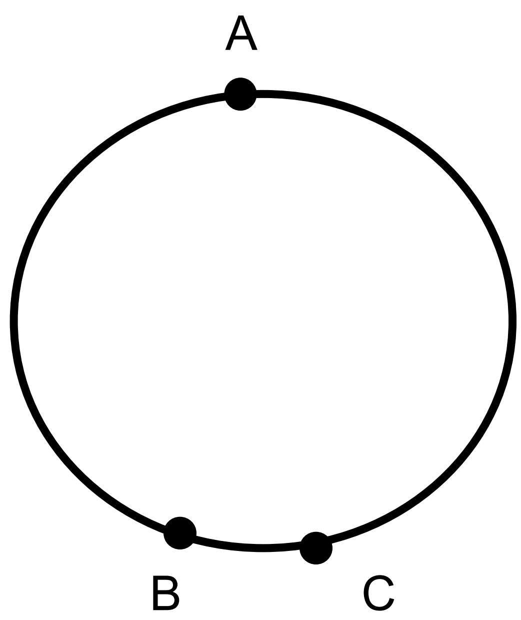
How did we get and effects based approach?

- Mergers
  - What do market shares tell us?
  - What is substitution: Product characteristics or response to price changes?
  - What can market surveys tell us about price effects of mergers?

Substitution, Market Definition, and Market Shares

- A likely has more market share than B and C combined
- B and C are better substitutes
- Merger of B and C will have larger effect than Berger of A and C
- Traditional market share analysis will disagree



Substitution, Market Definition, and Market Shares

- Product categorie is not Demand categorie
  - An Example:
    - Merger of a producer A of arm chairs and a producer B of armchairs and (two seat) couches. Considerable overlap on Arm Chairs.
    - A Bidding Study shows: Consumers demand either a single seat or two seats. Two thirds of the A Arm Chairs are sold to Two-Seat Customers.
- Chains of Substitution:
  - Are markets for petrol retailing national or local?

How did we get an effects based approach?

- Antitrust:
  - "Form based" vs. "Effects based" approaches
  - The Chicago School Critique
    - Arguments for anticompetitive effects not logically consistent
    - Efficiency arguments are ignored
    - The Chicago School Problem: Models too simple to explain either efficency or anticompetitive explanations of market behavior
  - The role of modern contract theory (Asymmetric information, incomplete contracts): Explains many institutional structures as efficient solutions to contracting problems.
  - Empirical studies support the importance of efficiency explanations (Lafontaine und Slade, Handbook of Antitrust Economics, 2005)

Table 2: Empirical Assessment of Effects of Voluntary Vertical Restraints

Author	Year	Industry	Variable (Y)	Effect (Y)	Effect (W)
Exclusive Dealing					
Slade	2000	Beer Retailing	Price	+	-
Asker	2004	Beer Dist	Cost	-	+
Sass	2004	Beer Dist	Price	+	+
			Consumption	+	
Exclusive Territories					
Jordan and Jaffee	1987	Beer Dist	Price	+	-
Sass and Saurman	1993	Beer Dist	Price	+	+
			Consumption	+	
Sass and Saurman	1996	Beer Dist	Consumption	+	+
Azoulay and Shane	2001	Several	Survival	+	+
Brenkers and Verboven	2004	Auto Distribution	Price	+	-
Tying					
Hanssen	2000	Movie Dist	Consumption	+	+
RPM					
Gilligan	1986	Many	Stock Returns	Mixed	Ambiguous
Ippolito and Overstreel	1996	Glassware	Consumption	+	+
			Stock Returns	+	
Sourcing Restrictions					
Barron, Taylor, and Umbeck	2004	Gasoline	Price	-	+

Effect (Y) denotes the effect on the dependent variable.
Effect (W) denotes the effect on consumer wellbeing.
RPM denotes resale price maintenance.
Sourcing restrictions are limitations on downstream input purchases.

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Economic Analysis Gives Discipline To Effects Based Analysis

- Theory of the Case
  - Is there a coherent economic theory that implies anticompetitive effects?
  - What alternative motives could explain the observed behavior?
- The basic assumptions of the theory of the case have to fit the relevant market
  - The theory of the case guides what relevant evidence is
  - There is a defense because it becomes clear what kind of information would support or contradict the theory of the case
- The use of multiple types of evidence
  - Economic data on prices, quantities, etc.
  - Internal strategy and planning documents
  - Market surveys
- The coherence of the theory and the different data sources together lead to a solid case

Merger Control in Practice

- The Main Question: To what extent do firms constrain each other in raising prices pre-merger
- Method of analysis depends on the data
- “Best Practice”: Combining different types of evidence to generate likely effects

The Available Data Dictates the Analysis

- Descriptive analysis is always relevant!
- Statistical information routinely collected in the industry
- Correlation and Stationarity Analysis (Arsenal/DSP, M-real Zander Reflex)
- “Reduced form estimation”: Impact of market entry on prices (Lufthansa/SN Holding, Lufthansa/Austrian, OneWorld Alliance)
- Demand estimation with an AIDS model (Friesland/Campina)
- Demand estimation and merger simulation (Unilever/Sara Lee)

Merger Control in Practice: A Happy Example

- Ryan Air/Air Lingus: Is a “Low Cost Carrier” in a different Market from a “National Carrier”?
- The Data (in addition to qualitative evidence):
  - Consumer Survey for Passengers out of Dublin
  - Correlation Analysis to test substitution between primary and secondary airports for same destination
  - Regression Analysis to test for impact of presence of the other carrier on the price of an airline.
- Fares and Passenger data for 5 years
- Decisive Evidence: Air Lingus sets considerably lower fares on routes on which Ryan Air is active. (Consistent with results of other quantitiative and qualitative evidence that the two are closest competitors)

Were the Economists too Successful?

- Should Ryan Air/Air Lingus be the empirical standard for any airline merger?
- If we have done merger simulation (as in Unilever/ Sara Lee), does that mean quantifying the price effect is essential for finding anticompetitive effects?
- How far do we really need to go to prove that a three to two merger is anticompetitive?

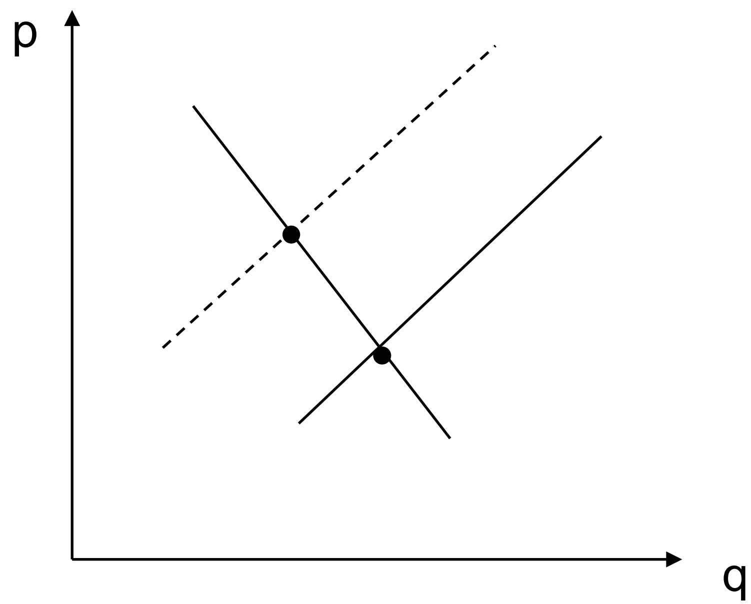
We must make decisions with imperfect data

- Empirical methodology chosen must be one for which there is adequate data
- Empirical analysis necessarily involves historical data. To give meaningful results historical performance must be a good indicator of future performance
- There must be sufficient variability in the data
- Data must allow identification

Rigorous Merger analysis with imperfect data

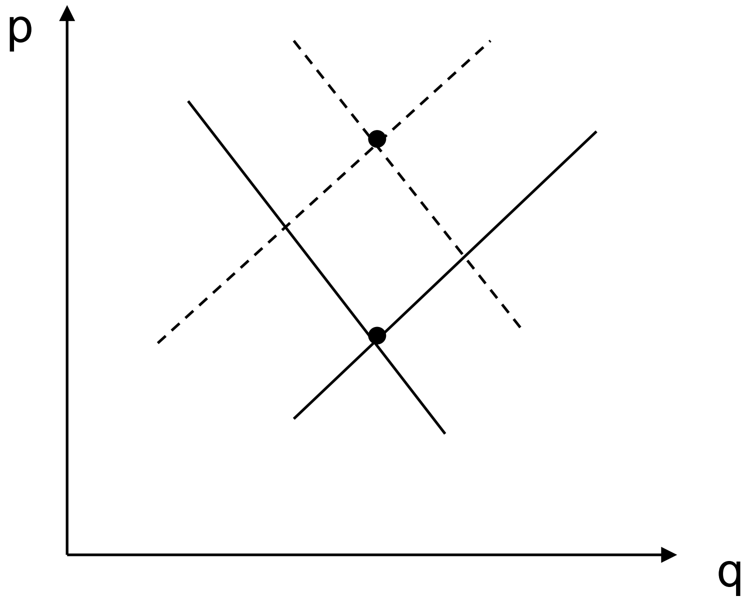
- Ryan Air/Air Lingus vs Olympic/Aegan
  - Olympic/Aegan similar to Ryan Air/Air Lingus
  - Duopol on Domestic Greek Routes– Competition by Ferries?
- The Data Problems
  - Historical Data not relevant: Regime Change
  - Only 11 time series observations
  - Data of ferry companies incomplete and unreliable
  - Consumer survey not possible
  - After correction for seasonality too little variation in the data
- The feasible Analysis:
  - Qualitative Information becomes decisive
  - Reconstruction of candidate markets
  - Appropriate considerations from theory to make inferences about likely impact given the descriptive market analysis

The Limit to Merger Simulation: identification



Identifying residual demand: Individual cost shifters

The Limit to Merger Simulation: identification



Identifying residual demand: The problem of common costs

The Limits of Quantification

- Quantification is very helpful to get an insight about the order of magnitude of effects
- Great instrument when there is scanner data
- Model uncertainty and robustness
- Quantitative Analyse is only one part of the overall analysis. A conflict between data and narrative evidence should spark more research.
- Quantitative analysis is not always possible and not always necessary (or appropriate)

New Challenges: Procedural Problems

- There is ever more data to process – the deadlines in merger control remain
- The asymmetry in time for consultants and agency
- Is the process manipulable?
- "Stop the Clock" and "Inspections" (Caterpillar/ MWM)
- Early exchange about data helps firms more often than it hurts!

The Challenge: Predictability and Incentives

- Communicating how economic analysis makes a difference
- Designing and sharpening the antitrust rules over time

“More Economic Approach” und Rechtssicherheit

- Führt es zu unvorschaubarer Fall zu Fall Analyse?
  - Theorien die Wettbewerbsschädigungen voraussagen sind nur selten anwendbar
  - Sehr starke Marktsetllung und Persistenz
  - Spielräume für Firmen haben sich erweitert
- Wie hoch war die Rechtssicherheit wirklich?
  - Marktdefinition als Spielball
  - Per Se Verbote: Tausch von Sicherheit für enorme Ineffizienz
- Rule of Reason vs. Bedingte Regeln
  - Vorausschaubarkeit ist wichig für Ökonomen

Die Anreizeffekte von Bussgeldern in Marktbeherrschungsfällen

- Im Gegensatz zu Kartellen kann das Verhalten in Marktbeherrschungsfällen gut oder schlecht sein
- Es kommt auf die Umstände an
- Traditionelles Denken: Minimierung von “Type I and Type II errors”
  - Führt zu einer Fall bei Fall Analyse
  - Aber: Wetbbewerbspolitik sollte ex-ante Anreize geben
  - Firmen sollten Praktiken vermeiden dann und nur dann, wenn sie wettbewerbschädigende Effekte haben

Die Anreizeffekte von Bussgeldern in Marktbeherrschungsfällen

- Ein (recht abstraktes) Beispiel:
    - Nehmen wir an:
    - wir wissen, Informationsaustausch ist schlecht in 50% der Fälle und gut in den anderen 50%
    - Ex-Post können wir genau feststellen in welcher Kategorie wir sind
    - Ex-Ante: Wir wissen nicht, welche Information uns erlaubt zwischen guten und schlechtem Informationsaustausch ex-post zu ungerscheiden.
- Was für Anreizeffekte hat eine Wettbewerbspolitik, die Informationsautausch verbietet genau dann wenn eine ex-post Untersuchung zeigt, dass wir einen schlechten Fall haben?
- Wissen Firmen wann das Verhalten “schlecht” ist?

Safe Harbors und Anreizeffekte

- Können Unternehmen Antitrustrisiken vermeiden?
  - Wenn nicht, gibt es geringe Anreize problematische Praktiken zu vermeiden
  - Safe Harbors geben die Möglichkeit auf Verhalten auszuweichen das Rechtssicherheit liefert
  - Safe Harbors erhöhen damit die Anreizeffkte der Wettbewerbspolitik
  - Es wird leichter Ex-post zwischen problematischen und unproblematischen Fällen zu unterscheiden.
- Beispiel:
  - Disaggregierter Informationsaustausch
  - Der UK Tractors Fall