

A framework for initiating ex-officio cartel investigations: *a two step approach*

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The views expressed are those of the authors.

overview

- objective of the framework
- political and research context
- a two-step framework
 - Step one – industry analysis
 - Step two – critical event analysis
- concluding remarks

objective of the framework

- quantitative and qualitative economic analysis aimed at establishing the requirements
 - **for issuing an inspection decision** in a given antitrust market;
 - **justifying the opportunity cost** of carrying out an inspection.
- ? not a tool for proving the existence of cartels
- **complementary to leniency policy**
- ? increases incentives for the “race to leniency”

policy context

- **OECD roundtable conference (2006)** concluding that circumstantial evidence, in particular economic evidence, is getting increasingly important for two reasons:
 - it is getting more and more difficult to find direct evidence, so that circumstantial evidence is needed;
 - economic evidence is important to trigger investigations.
- **some countries** trigger investigations based exclusively on economic indicators
 - Italian baby milk case (cross-country price benchmarking)
 - Dutch shrimps case (structural indicators)
 - economic criteria to prioritize complainants in the Brazilian gasoline retail market (margin increase & reduction of price dispersion & regions)

research context

- ❑ **Harrington, J.E. (2005):** Detecting Cartels. Forthcoming in: *Advances in the Economics of Competition Law*, Paolo Buccirossi (ed.), MIT Press.
- ❑ **Gual, Jordi and Nuria Mas (2004):** EU Antitrust Policy: priority setting and impact assessment study. *Internal Report*, DG COMP.
- ❑ **Grout, Paul A. and Silvia Sonderegger (2005):** Predicting cartels. *Economic discussion paper*, OFT.
- ❑ **Nera (2004):** Empirical indicators for market investigations, prepared for the Office of Fair Trading. OFT749a.
- ❑ **Abrantes-Metz, Rosa M., Luke M. Froeb, Christopher T. Taylor and John F. Geweke (2006):** A Variance Screen for Collusion. *International Journal of Industrial Organization*. 24, 467– 486.

two-step approach

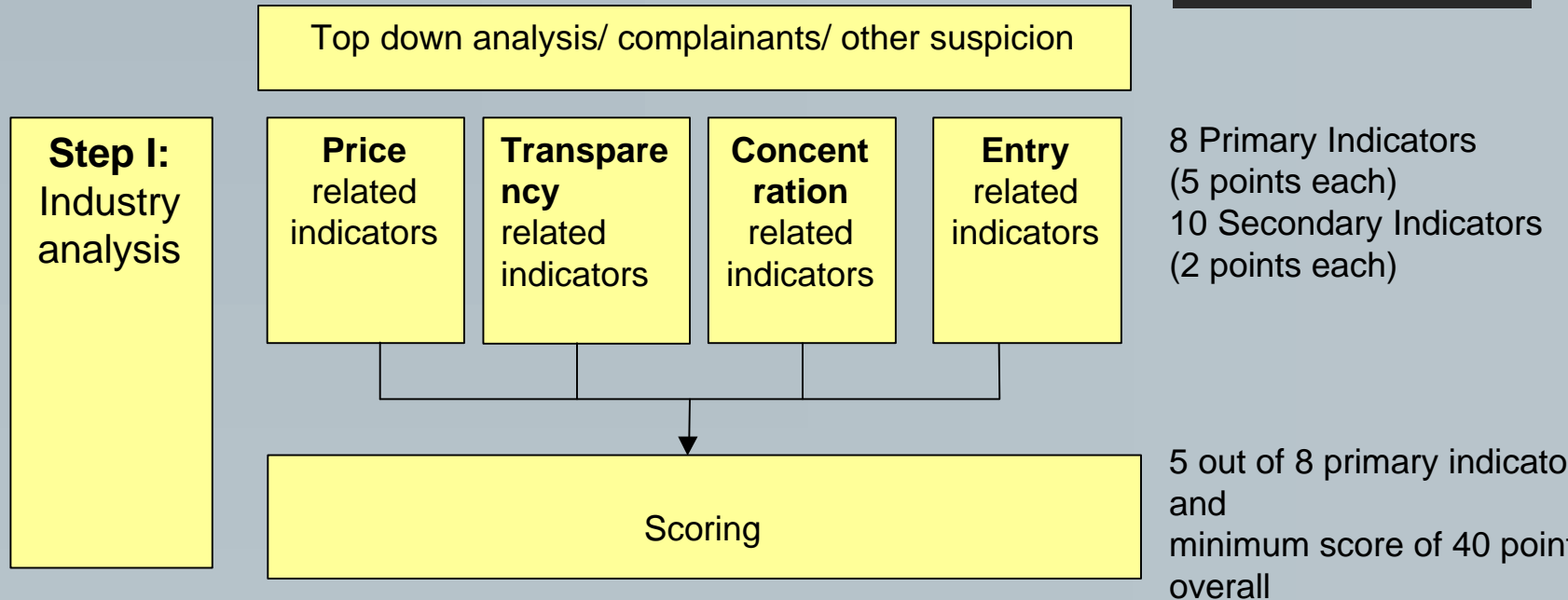
why a two-step approach?

- to limit resource requirements
- while achieving a reasonable level of robustness

the two steps:

- **industry analysis**: scoring approach aimed at exclusion of cases where cartel activity is relatively improbable (necessary requirements; minimize false negatives)
- **critical event analysis**: in-depth approach aimed at testing collusive against competitive scenario (necessary & sufficient requirements; “more likely standard”; minimize false positives)

Step 1: Industry Analysis



Step II: Critical event analysis

Indicators are chosen based on:

- **theoretical considerations (robustness)**
- **practicability (data availability, calculation)**

Step 1: Industry Analysis cont.

- **Defining the Antitrust Market**

best guess approach, open to modification

- **Observation period**

period over which the analysis is carried out

- **Critical time window**

time period within the observation period that is under particular suspicion

- **Assess individual indicators**

underlying question, data requirements, method of calculation, threshold, motivation

? **Mixture of checklist and structural break approach**

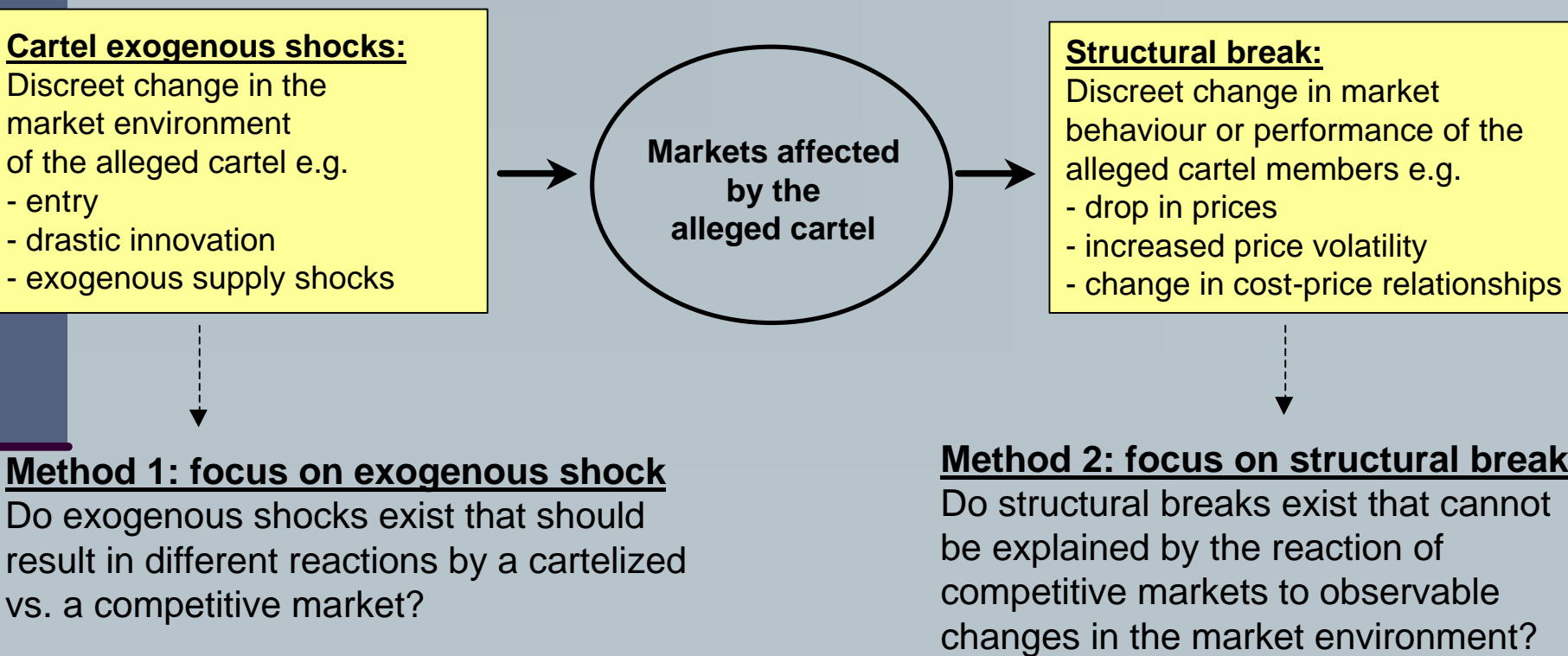
Outcome & Limitations of Step 1

- Scoring and Qualitative assessment allow a **refinement of the theory of harm** and a **first indication on potential critical events**.
- Each individual indicator is necessarily inconclusive as to the purpose of meeting the standard for triggering an inspection.
- Even aggregating all indicators in the scoring does not fully address false positives.
- The industry analysis is concerned about picking up cartelized markets. It does not predominantly worry about false positives.
- False positives are dealt with in step 2. Step 2 aims at testing a possible theory of harm.

Step 2: Critical Event Analysis

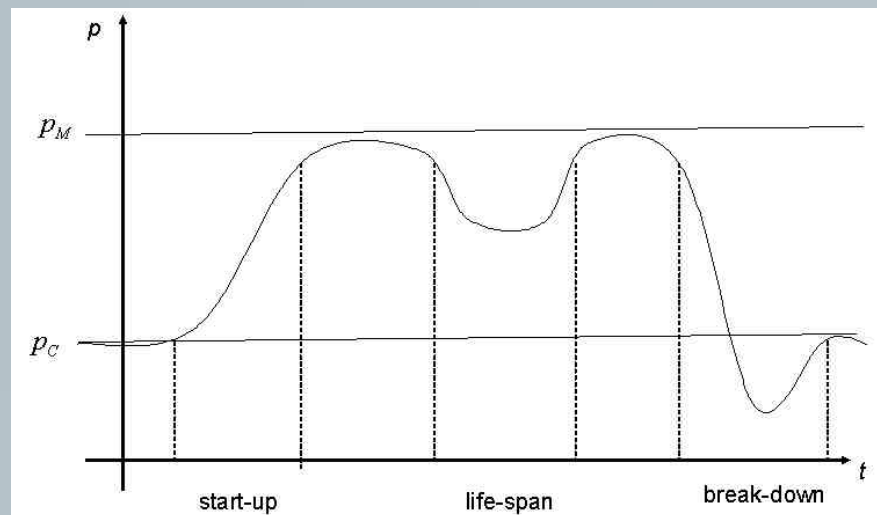
- ❑ **Critical event analysis:** in-depth approach aimed at testing collusive against competitive scenarios (“more likely standard”; minimize false positives)
 - ❑ **Critical event:** a significant change in one of the market factors (such as the number of players in the market or a change in the price level) - either itself or through the subsequent reaction of market participants to that change - allows to infer the probability of the market being either in a competitive or in a collusive situation.
- ? **focus is on ‘changes’**

How to **identify** and **analyze** critical events



How to **identify** critical events – a typology

- ❑ Ordered along the life-span of a cartel
- ❑ Overall seven critical events are identified
- ❑ Open to new ones...



For example (cartel start-up): structural break in prices and in price volatility at industry level, see Abrantes-Metz et al. (2006)

How to **analyze** critical events – a general test:

- ❑ **critical event evidence:** the empirical evidence of the critical event has to be (re)-assessed;
- ❑ **effective competition scenario:** it has to be assessed which factors specific to the industry could explain the observed behaviour under the assumption of effective competition;
- ❑ **collusive scenario:** it has to be assessed which factors specific to the industry could explain the observed behaviour under the assumption of collusion;
- ❑ **verification test:** based on the scenarios developed under step b) and c) it has to be argued that the observed behaviour **is more likely** to be explained by a collusive scenario.

The case library – a collection of cartel cases

1. benchmarking
2. identify appropriate analytical tools
 - which tests have proven to be useful?
 - can the test provide sufficient evidence?
3. guidance on how to carry out the analysis
 - case description, references

? important for the creation of in-house expertise

concluding remarks

- ❑ explicit vs. tacit collusion – economics in limbo?
- ❑ bidding markets - something special?
- ❑ data requirements
- ❑ administrative capabilities