

# 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

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- 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

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- 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

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- **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

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- ❑ **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

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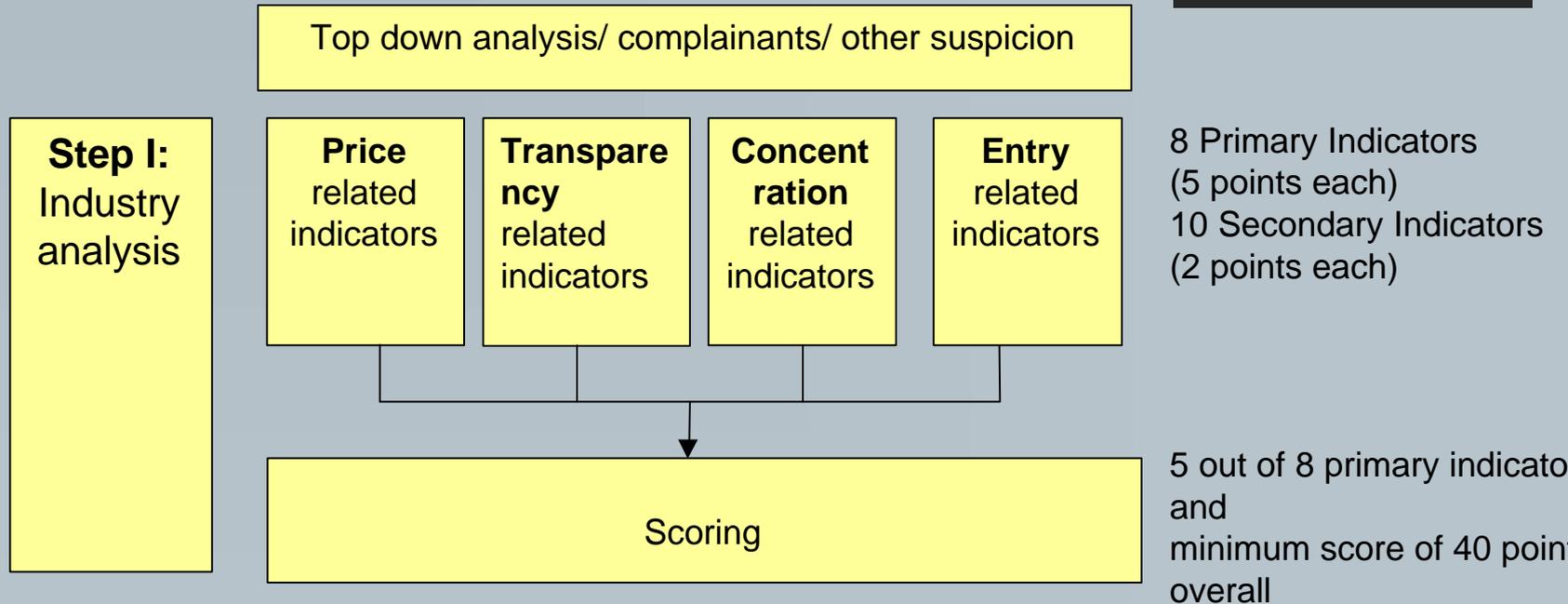
## why a two-step approach?

- 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.

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- **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

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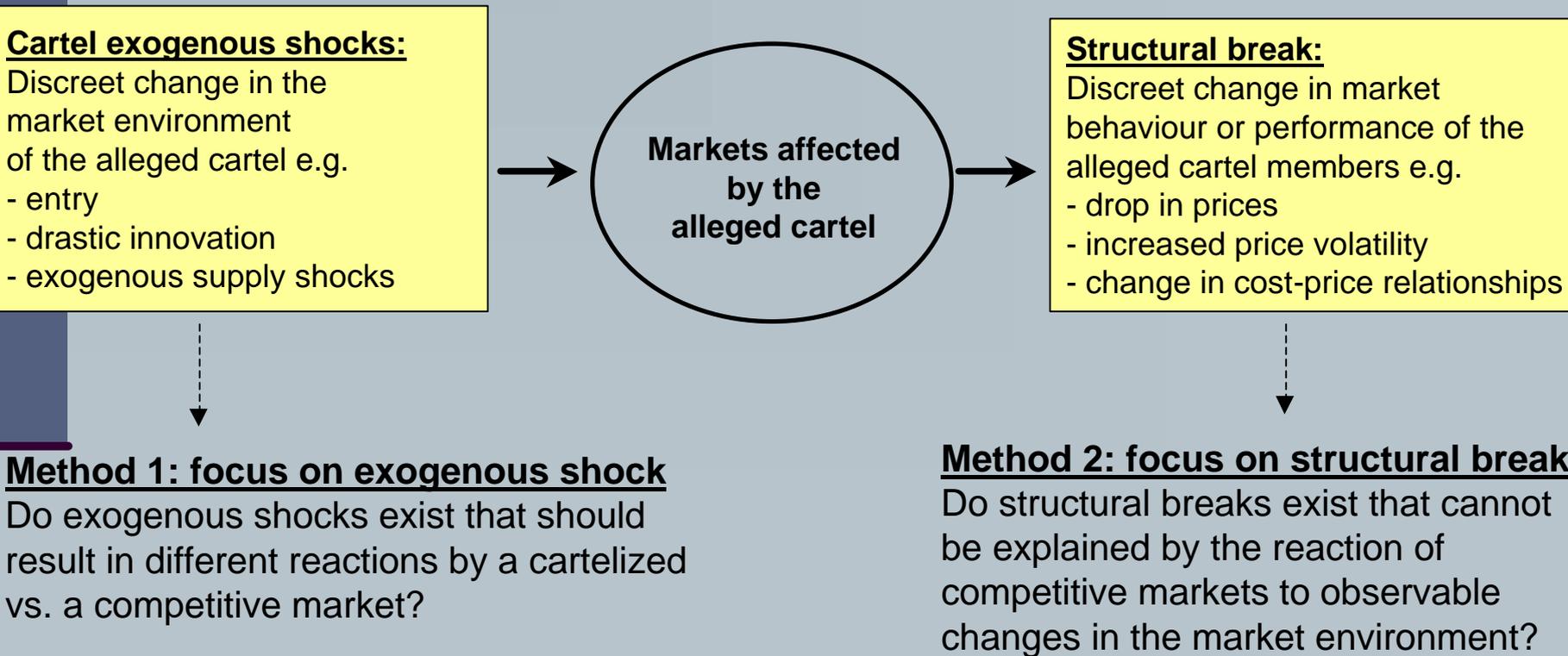
- Scoring and Qualitative assessment allow a **refinement of the theory of harm** and a **first indication on potential critical events**.
- Each individual indicator is necessarily inconclusive as to the purpose of meeting the standard for triggering an inspection.
- Even aggregating all indicators 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

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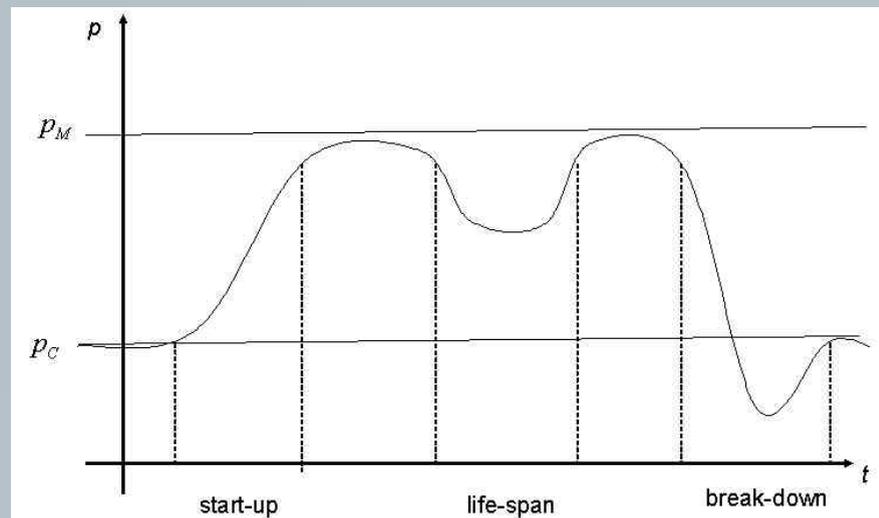
- ❑ **Critical event analysis:** in-depth approach aimed at testing collusive against competitive scenarios (“more likely standard”; minimize false positives)
  - ❑ **Critical event:** a significant change in one of the market factors (such as the number of players in the market or a change in the price 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:

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- ❑ **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

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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

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