

# **The Cost of Simplistic Rules in Assessing Information Sharing: *The Italian Jet Fuel Decision***

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# Outline

- **Decision practice of national authorities recently conflating *information sharing* and *existing collusion***
  - Only conditions: disaggregated data and some circumstantial evidence (parallel prices, or alleged pattern of customer allocation)
- **Policy insights from economic analysis:**
  - **Can information sharing be used directly to infer existing collusion?**
  - **When should information exchanges be considered as antitrust violations in themselves?**
- **What should be “best practice” rules in line with modern approaches to antitrust?**
- **A case study: the Italian *Jet Fuel* case**
  - Simplistic rules based on level of disaggregation of information inappropriate to filter anticompetitive information exchanges

# Issues raised by the Italian Jet fuel case

- **Key market features affecting relationship between competition and information sharing**
  - Jet fuel contracted for by airlines through **annual bidding process**
  - Considerable **cooperation between jet fuel suppliers at post-contracting stage**: swaps and trades to minimise transport costs; economies of scale in storage at airports and delivery “into plane”.
  - Storage and delivery run as **airport JVs** between suppliers.
  - Large amount of **detailed information exchanged within JVs (and between JVs) about delivery volumes/costs**
- **Can the information exchange at the JV level affect competition between the oil companies?**
- **At which level of the vertical supply chain could competition be affected?**

# Relationship between collusion and information exchanges

- **Information exchanges can increase likelihood of collusion if they “improve monitoring” of competitors’ actions (more dubious that they can “facilitate reaching of an agreement”).**
- **But many forms of information exchange also have *efficiency benefits*, which is why placing limits on them is so problematic.**
- **Optimal policy design towards information exchange is about *systematic assessment of these trade-offs*.**
- **Policy recommendations in the literature: e.g. Kühn and Vives (1995) and Kühn (2001) argue only exchanges with high degree of disaggregation should come under scrutiny, as more likely to facilitate collusion and less likely to generate efficiency benefits.**
  - Disaggregation can help to design individualised punishments
  - Efficiency benefits could still be realised through more aggregated information (see *UK Tractors*)

# Can *existing collusion* be inferred from an information exchange?

- Can information exchanges be used as direct evidence for an existing collusive agreement, and be punished as such?
- Fundamental distinction between two types of communication:
  - Private communication about *planned future conduct* (“cheap talk”)
  - Private communication about *current market information, or past actions*.
- Information on *planned future prices* is *direct evidence for collusion*: no good efficiency argument, but crucial in coordinating on collusive outcome (*future production* more controversial).
- On the other hand, *communication about current market conditions or past actions* does *not* provide such evidence - even when disaggregated
  - Maybe that’s the way information was collected, and no one bothered to aggregate it.

# Restricting information sharing as a *preventive* policy?

- Information exchanges that are not about future prices can constitute antitrust violations *in themselves*.
- However enforcement against information exchanges *not* about *communication of future conduct* should primarily be *preventive*, and cannot serve evidentiary purposes in collusion cases.
- Here role of competition policy is to detect such schemes, and replace them with appropriate alternative systems without same risks. High deterrent fines for collusive conduct not warranted.
- **Some established rules in the literature:**
  - (a) Monitoring *past prices or past output* problematic as can reduce uncertainty about rivals' past conduct;
  - (b) Information on *current demand* can reduce demand uncertainty, though not eliminate uncertainty about rivals' past conduct.
  - (c) Highly *disaggregated data* problematic as it facilitates punishments targeted at deviators, and allows faster responses to deviations.

## Restricting information sharing as a *preventive* policy (2)

- **Some additional rules:**

(d) Exchange of *cost* information does not help monitoring collusive agreements (though may improve efficiency of an agreement).

(e) **Disaggregated information on *deliveries* (rather than sales) less likely to improve monitoring**

e.g. competition *for long-term supply contracts*: relevant information for collusion is whether one has made the agreed sale or not. Further disaggregation of *delivery data adds no relevant information* for contract competition (but may have efficiency purposes).

(f) Additional *efficiency effects* of information exchanges, especially in vertically related markets.

# Policy implications

- **Overly simplistic rules (e.g. on “level of disaggregation” of the data) can lead to highly dubious decisions.**
- **Difficult however to define systematic rules for all trade-offs between “dangers to competition” and “efficiency benefits”:** potentially many different types of benefits from information exchanges.
  - e.g., work in operations research has highlighted significant potential efficiency gains from information exchanges along the vertical supply chain (such as reducing storage costs). Relevant to cases where vertical information exchanges may imply horizontal information flows.
- **Case-by-case approach inevitable, but we should still be guided by a series of contingent rules.**

# Systematic approach to assessing information exchanges

- 1. Safe-haven rules**: concerns not warranted for aggregate data; cost information; and possibly information only on delivery data.
- 2. Well-specified theory of the case**: how could collusion arise in this market and what information would help firms to collude?
- 3. Assessment of marginal impact of information exchange on market transparency**: does information exchange significantly increase the ability of firms to punish others for deviating?
- 4. Assessment of efficiency defences**: burden of proof on investigated parties. No defence if same efficiencies could be obtained through different information exchanges that generate lower risks of collusion under the theory of the case.

# The Italian Jet Fuel case

- **No evidence that an agreement was in place between jet fuel suppliers on the Italian market: no evidence of meetings, discussions or any other form of communication about future pricing/bidding conduct.**
- **Classic evidence (simultaneous finding of documents with the same information about planned conduct at different companies) was missing.**
- **Case relied on *sharing within airport JVs of disaggregated information*:**
  - On *contracts* concluded by suppliers with airlines
  - On *product flows* into storage for each supplier
  - On *deliveries* to each airline by supplier, including estimated future deliveries
  - On *tariffs* charged by the JV to each member for the supply of airport services
- **In combination with:**
  - “Oligopolistic market”, “low volatility of market shares”
  - Claimed “evidence” of market sharing and customer allocation: sum of bidders’ offers close to 100% of airline requirement at a given airport;
  - “Low churn” of incumbents (10-20% a year), no “aggressive competition”.
- **The six suppliers found guilty of having operated “an understanding” and fined a record €315 million collectively. Decision is under appeal.**

# Did the exchange provide evidence of existing collusion? Was it otherwise anticompetitive?

- **No communication about future pricing or bidding strategies.**
- **High levels of disaggregation: could there be a trivial explanation?**
  - JV managers may have found it easier to simply send around a pre-existing spreadsheet with disaggregated data than to spend the time and effort to aggregate data before distributing it.
- **No sudden increase in amount and frequency of information exchanged, and/or level of disaggregation, to coincide with the alleged “start” of a collusive arrangement.**
- **The information exchange provides no *direct* evidence for existing collusion.**
- **Could it nonetheless be anticompetitive, and should it be prevented?**

## Step 1: Preliminary “safe haven” considerations?

- **Sharing information on costs (service charges by the JV to each supplier, for storage and “into plane” deliveries; even worse, doing swaps) *has a very limited impact on supporting collusion.***
  - Can make agreements more efficient, but this is second-order relative to monitoring of prices/quantities
  - Claim that company documents considered these information “strategically important” for their own bids vis-à-vis the airlines does not contradict this.
- **Volume data was on *deliveries* only, not on sales.**
- **Nonetheless, because the data was highly disaggregated, and some of it was about estimated future deliveries, it would be hard to close the case immediately under some safe-haven rule.**

## Step 2: Theory of the case?

- **Several market features make it *a priori* implausible that suppliers could effectively coordinate in bidding for airline supply contracts**
  - High asymmetry in market structure;
  - Infrequent contracting with individual airlines, asymmetries in contract size.
- **Low volatility of market shares and alleged low churn – even if true – are poor evidence for collusion.**
- **Share bids adding to 100% need not result from a prior agreement**
  - Random/independent “rolling over” of previous year’s contracts would lead to a probability of the same result
- **Can weak “evidence” of collusion be “strengthened” by finding an information exchange on disaggregated delivery data?**
- **Pieces of evidence that do not add up to collusion by themselves *do not become stronger through accumulation*; and finding an information exchange does not make an incorrect argument more plausible.**

## Theory of the case? (2)

- **Competition in jet fuel takes place at the stage of bidding/negotiation for *annual share contracts***
  - No competition at the final delivery stage, operated through the JVs.
  - Storage and “into plane” delivery services are inputs into the supply contracts.
- **Collusion at that stage would involve an *agreement on delivery shares*.**
- **Dissemination of information through JVs would matter if it could substantially facilitate collusion at the stage of bidding and bargaining for supply contracts: i.e. if it helped reveal (or reveal “faster”) whether someone deviated from the agreement, and who was the “deviator”.**
- **Can the sharing of information through the JVs substantially improve the monitoring of competitors’ actions at that critical stage?**

## Step 3: Does the information being shared *significantly* improve monitoring?

- **High market transparency ensured by contracting process itself**
  - *Share contracts* automatically reveal more information than standard supply contracts (where each supplier only knows volumes he contracts for).
- **Monitoring problem virtually eliminated**
  - Each bidder directly observes his share at end of negotiation. To monitor compliance he just needs to know if he was allocated the share he bid for.
- **Only information not directly revealed by share contracts is *identity* of “deviating” rival: might allow “targeted” punishments**
  - i.e. punishments less costly. But impact on scope for collusion small.
- **Also airlines typically reveal considerable information on rivals’ actual or alleged positions in order to induce reductions in prices.**
  - e.g. feedback on reasons why share target was not achieved, or share was lost at a given airport, including identity of rivals who gained share, and differences between supplier’s bid and winning bid.

## Improvement in monitoring? (2)

- **Classic monitoring problem (imperfect observability of others' strategies) virtually eliminated in the case of share contracts**
  - Performance of one's own contract reveals whether rivals have complied with a putative collusive agreement.
- **Information on rivals' deliveries, if aggregated up, can confirm which *particular* rival cheated, and allow for more targeted punishments. This could reduce cost of retaliation, but not have major impact on the feasibility of collusion.**
  - Much of the information that detects individual deviators revealed anyway in the course of contract negotiations with airlines.
- **Disaggregation of delivery data adds no further information critical to collusion (think about even more frequent data, monthly or daily).**

## Step 4: Efficiency motives for the information sharing?

- **To ensure that aircrafts are refuelled promptly and efficiently, storage and into plane delivery JVs must tightly coordinate. Need a smooth flow of information along vertical supply chain**
  - Storage JV must ensure **right volumes are released** on behalf of each supplier to the right “into plane” JV
  - “Into plane” JV must **organise delivery schedules** to optimise manpower requirements
  - JVs must ensure **deliveries are correctly split** for shared airline customers
- **JV managers face complicated problem of cost minimisation and strive to implement more efficient pricing systems reflecting differences in refuelling costs for different planes at various times of day. Achieving these efficiency gains requires analysis of increasingly detailed delivery and cost information.**

## Efficiency motives (2)

- **JV directors (oil company logistic experts) need highly disaggregated data to audit performance of management (e.g. avoid biases in cost allocation), to ensure their shares are met, and make decisions on changes to pricing mechanisms.**
- **Is there any justification for the “spillover” of some information to parent companies?**
  - Knowledge of actual refuelling costs for each airline at each airport allows suppliers to factor into their bids the actual costs of servicing the contracts (and implicitly price congestion of refuelling services)
- **Undisputed that at some stage in the vertical chain highly disaggregated data is necessary for monitoring the manager and for informed owner decisions e.g. on price schedules. Could this be delegated to outsiders without loss of benefit? No (contrast with UK Tractor case).**
- **These considerations should carry much weight in cases where the marginal impact of the scheme on collusion is minimal.**

# Summary: our view of the case

- **Case is an example of misguided application of simplistic policy rules about level of data aggregation.**
- **Fines in line with “proven collusion”, rather than preventive action towards “inappropriate” information exchanging.**
- **In terms of our steps:**
  - “Safe haven” considerations: information on delivery data inherently less suspect than sales data.
  - No “theory of the case”, i.e. assessment of the theoretical feasibility of collusion and impact that an information exchange could have on it
  - Marginal impact of information exchange regime on transparency of the market (and on ability to collude) negligible.
  - Efficiency defences entirely ignored.
- **Case for intervention: antitrust authorities should work with suppliers to reduce potential for harm to competition arising from “unnecessary” exchanges, while preserving efficiency enhancing features.**
- **But this policy goal does not warrant “hard enforcement” against collusive agreements in dubious cases.**

# Conclusions

- **Policy approach towards information exchanges should be preventive.**
- **Our recommended approach is conservative, in line with the literature, to allow efficiency benefits that cannot be clearly shown to be achievable through an alternative information exchange to prevail.**
- **A theoretical harm should not trump well-argued efficiency reasons.**