Economic techniques in merger control:
Practical developments in the assessment of horizontal mergers

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Developments in the practical assessment of mergers

New directions in unilateral effects analysis

- **Continued expansion of economist teams**
- **Increased use of demand estimation to define markets**
  - Increased scepticism of pricing analysis (with some exceptions)
  - Attempts to apply increasingly sophisticated estimation methods
- **This drives increased data requirements**
  - Now very standard to be asked for 5 years of transaction data
  - This is a heavy practical requirement: presenting commercial data available from firms in a way that makes it useful for econometric analysis
- **In practice models often fail, and more descriptive analysis can often prove decisive**
  - Models often fail in the very cases where markets are likely to be wide
  - Much more "basic" analysis of switching/price discrimination can be decisive under these circumstances
- **Similar issues seen in two recent cases:**
  - Pan Fish/Marine Harvest/Fjord Seafood (UK & French authorities)
  - INEOS/Kerling (European Commission)

INEOS/Kerling

Merger to monopoly in the UK or a wider European market?

- **Merger between the only two UK producers of S-PVC (used for the manufacture of window frames and pipes)**
  - UK share around 70% (30% imports)
  - Share of any wider geographic definition < 30%
  - Agreement that the deal raised no issues if the market is wider than the UK
- **Concern that prices to UK customers might increase:**
  - Could importers bring in sufficient additional materials?
  - Were imports substitutes for domestic supplies, or are they inferior due to increased lead time/reliability issues?
  - Are all customers equally capable of switching to imports?
  - If not, is it possible to identify and price discriminate against customers who are less willing or able to switch?

Pan Fish/Marine Harvest/Fjord Seafood

Dominance in Scottish salmon or wider market for farmed salmon?

- **Merger between the two largest salmon farming companies in the world: both with significant operations in Scotland and Norway**
- **The parties account for:**
  - around 30% of all Atlantic salmon farmed in Europe (global share is similar)
  - around 45% of the Scottish salmon harvest
- **Several theories of harm raised by the UK Competition Commission and DGCCRF in France:**
  - "Short term" unilateral output restriction (e.g. harvest early)
  - "Long term" unilateral output restriction (e.g. buy fewer eggs)
  - Post merger price discrimination
- **UK cleared unconditionally: France required divestments in Scotland (although less than had been offered in Phase I)**

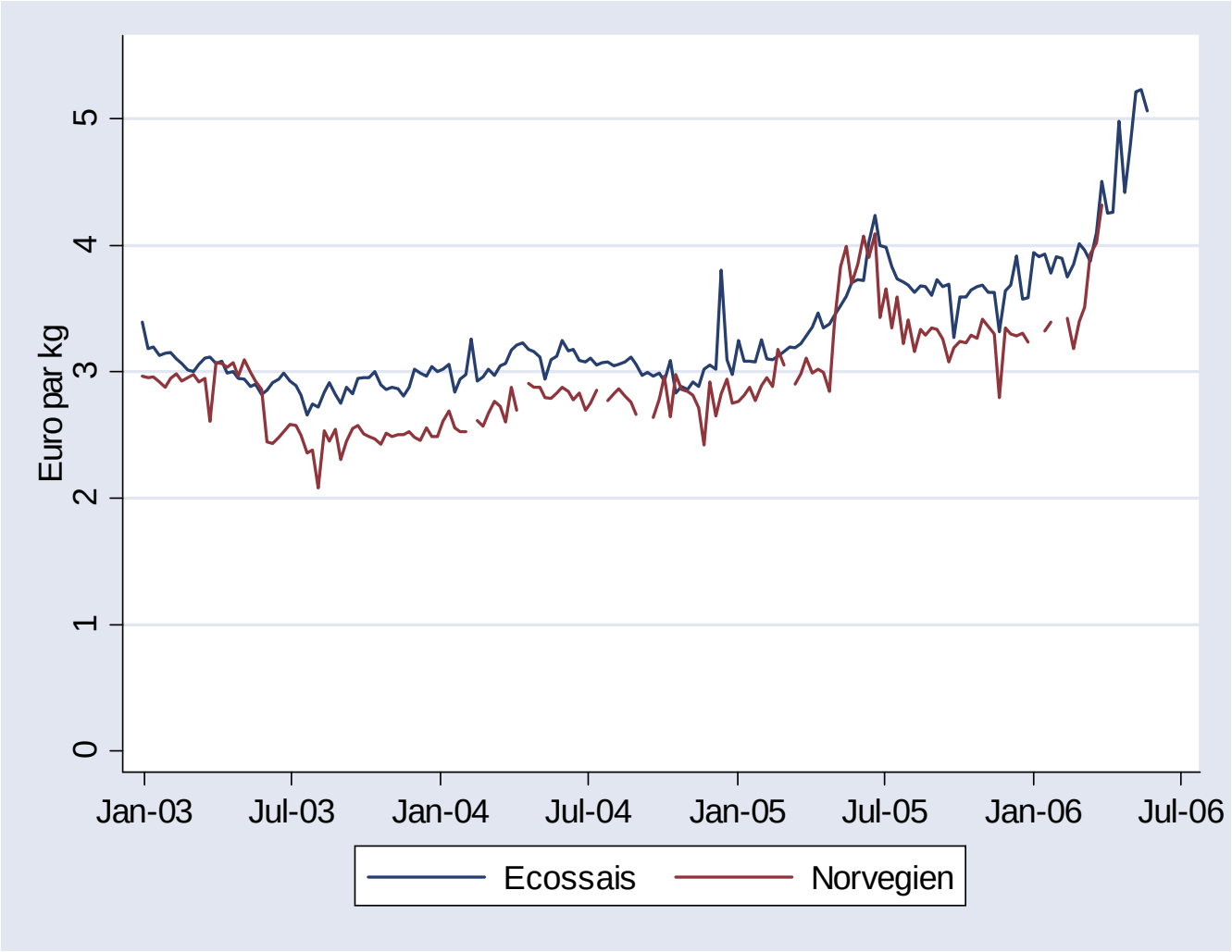
Pricing analysis

Even strong results from pricing analysis may not be enough

- **In both these cases strong price correlation results suggested wider markets:**
  - INEOS/Kerling: between SPVC prices in different countries
  - Pan Fish/MH/FS: between Scottish and Norwegian salmon
- **However, pricing analysis doesn't directly answer the SSNIP test**
- **Increasingly the authorities will look for evidence of shocks that would drive prices apart absent competition**
  - INEOS/Kerling
    - Increase in East European consumption relative to the UK
    - Exchange rate shock (€/£)
  - Pan Fish/MH/FS:
    - Increased Russian demand for Norwegian salmon
    - Large (25%) reduction in Scottish production due to high costs
- **In the end, the pricing evidence was influential in both cases: but not until modelling approaches had been exhausted**

Pricing analysis

Norwegian and Scottish salmon prices correlated and stationary



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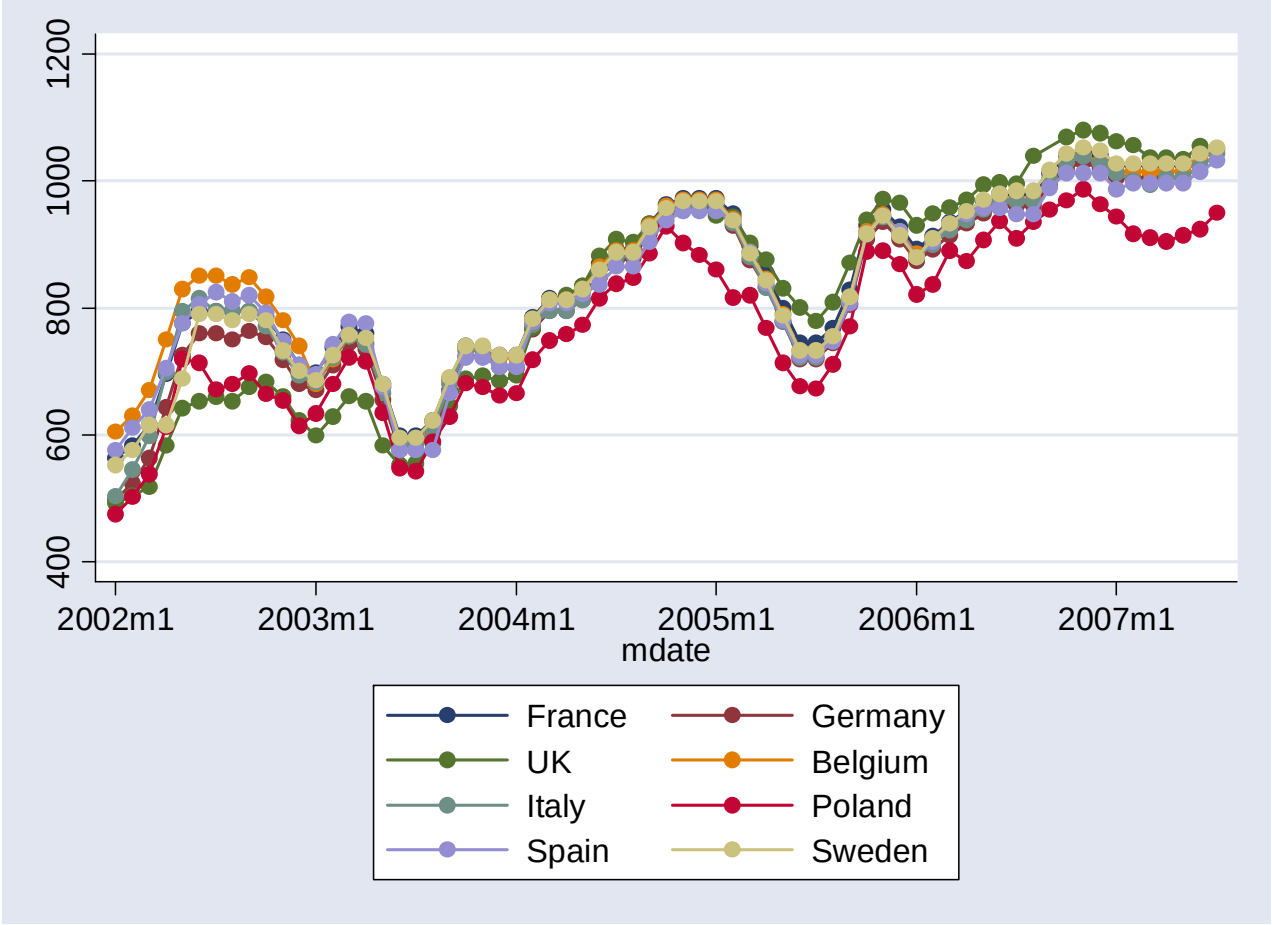
Pricing analysis

S-PVC prices correlated and relative prices stationary



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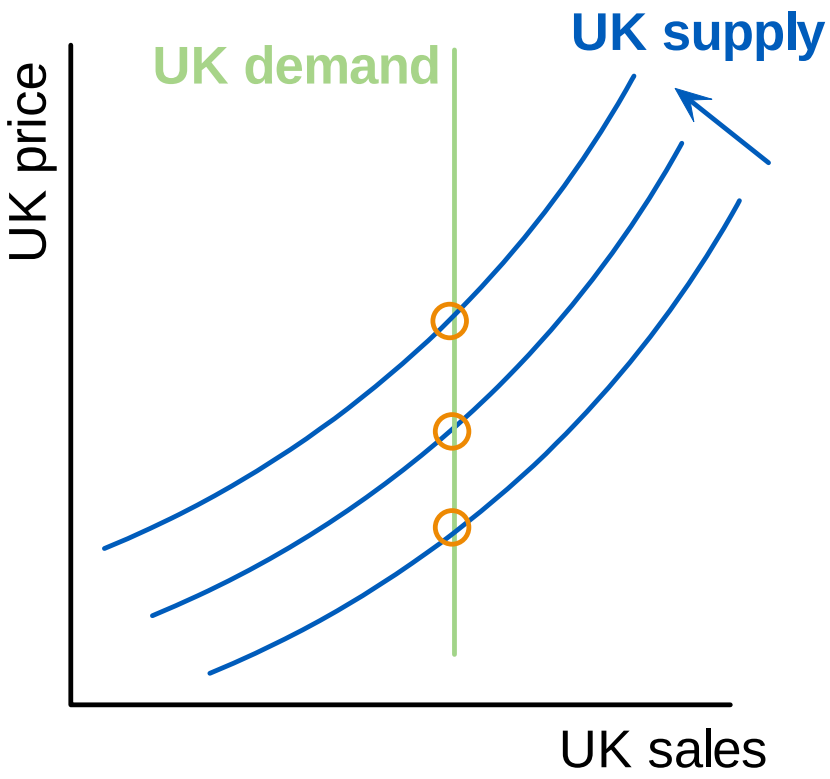
Estimating demand
Requirements for a robust model of demand are high

- **Estimating demand elasticities directly answers the SSNIP:**
  - SSNIP asks how much demand would be lost if prices went up
  - "Elasticity" is just a measure of how sensitive demand is to price
- **In practice, obtaining robust estimates can be very challenging:**
  - Finding an appropriate theoretical framework can be challenging
    - In INEOS/Kerling the CET were keen to apply a "residual demand model" – rarely applied (if ever), and didn't produce robust results
  - Getting good enough data to test the demand model (in terms of frequency, accuracy, variance) is also a problem
- **Wide markets cause problems for estimating demand on a narrow segment of that market:**
  - How do we see responses to changes in relative price of Scottish and Norwegian salmon, or Dutch and UK SPVC, when there are none?
  - How do we "pin down" demand curves for Scottish salmon or UK SPVC, when they are strongly related to demand for Norwegian salmon or Dutch SPVC?

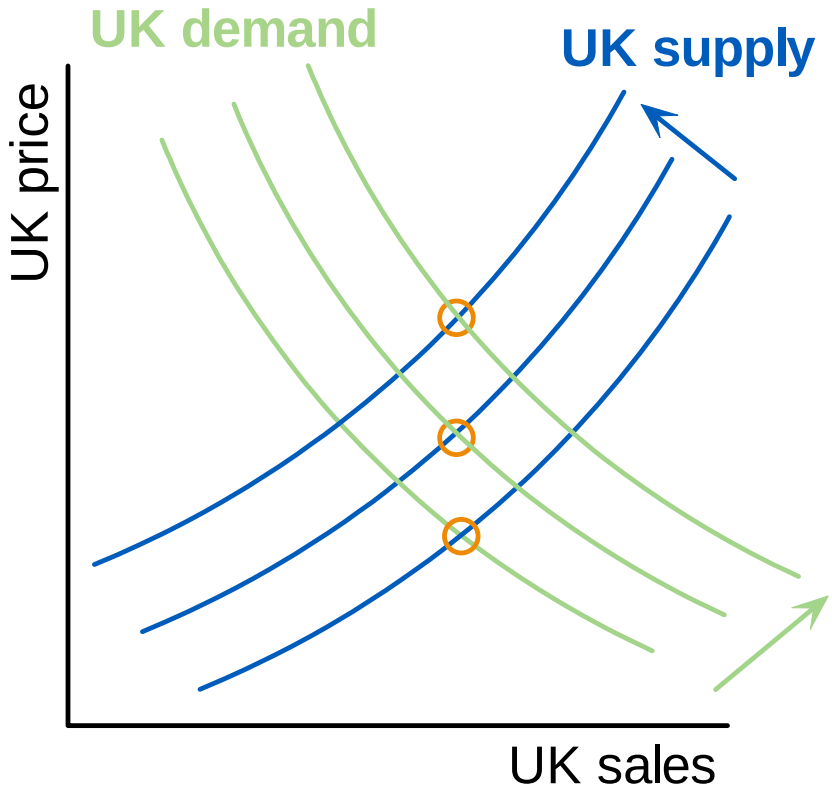
Estimating demand

INEOS/Kerling: problems identifying UK demand

Are we seeing this...



... or this?



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The demand for data

Key challenges in putting together detailed data responses

- **No transactions data sets are ever entirely "clean"**
  - Returns
  - End of period discounts
  - Financial adjustments
- **"Correct" economic treatment depends on the analysis**
- **Less problematic if an entire transactions database is requested (e.g. Pan Fish/Marine Harvest) – allowing robustness checks of different treatments**
- **In INEOS/Kerling it did matter, as the Commission wanted the data to be aggregated by customer type**
  - The Commission therefore required 4 different "cuts" of all the data (with/without returns, with/without end-of-period discounts) – significantly increasing the workload
- **Can be worth getting hold of transaction data early**
  - to understand what "story" the data tell about competition in the market
  - to be as prepared as possible for these potential technical issues

Finding another way through

The Pan Fish case

- **The parties had offered a complete divestment of the Scottish overlap at Phase I: so issues even in a wide market had to be tested**
  - CRA developed a unilateral effects model – showing that on a wide or narrow market definition no significant price increase could be expected
  - This was taken into account in the UK, but less so in France
- **Ability of rivals to expand was crucial (key point on which the UK and French authorities disagreed: despite the same evidence)**
- **The UK authorities also seriously looked at the possibility of post-merger price discrimination**
  - Will "Scottish only" customers pay more for Scottish salmon post-merger even if there is no general increase in Scottish salmon prices?
  - Detailed econometric analysis of transaction data showed no such effect today, despite greater concentration in relation to Scottish salmon
  - Evidence suggested that independent Scottish rivals would remain able to serve all "Scottish only" customers if necessary

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Finding another way through

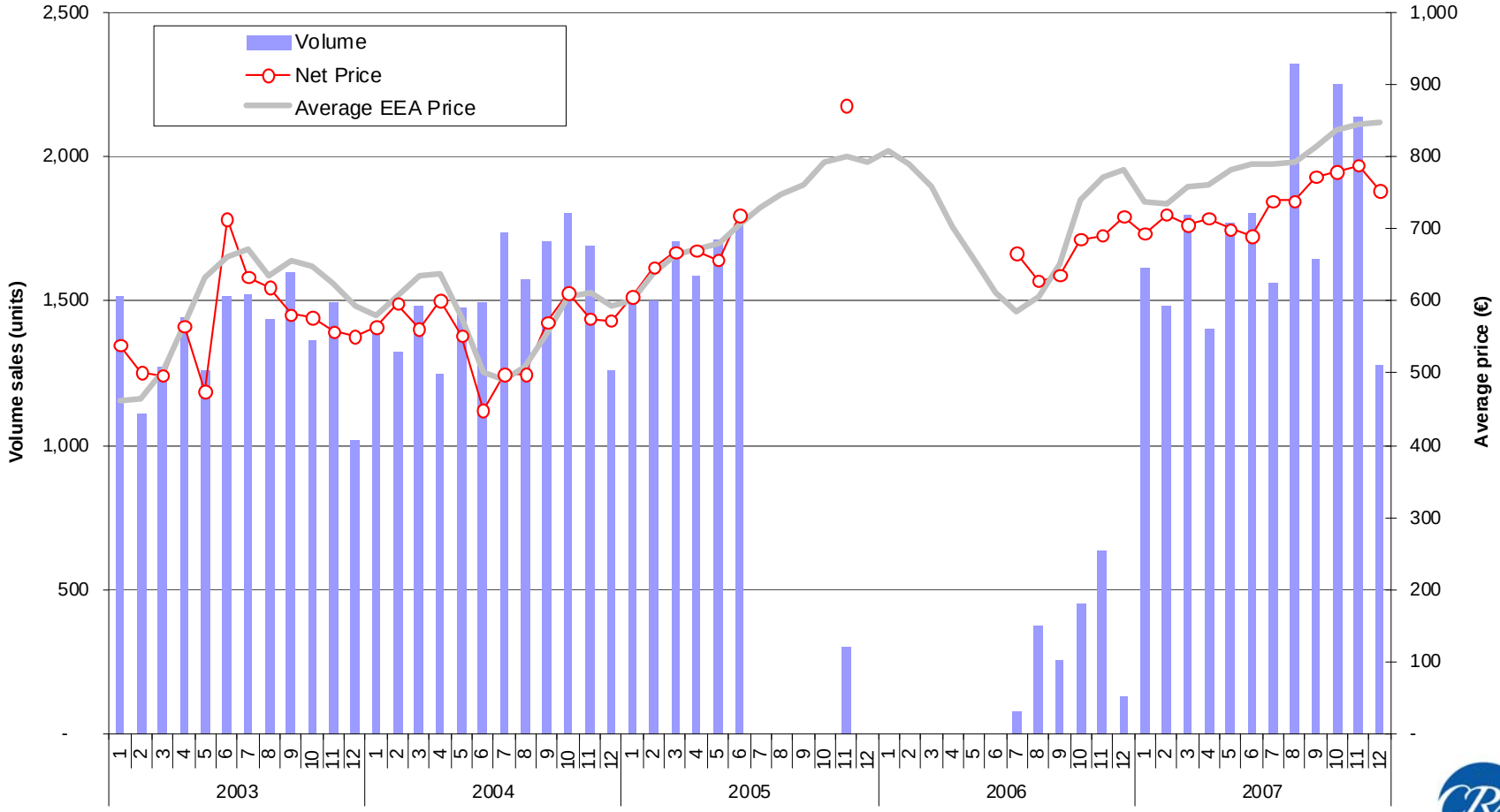
The INEOS/Kerling case

- **Customer level analysis was carried out for all the parties' large UK customers (accounting for over 95% of sales)**
  - Many customers multi-source from domestic suppliers and importers
  - Many customers switched either wholly or in part between importers and the merging firms
  - No evidence that there were any customers "captive" to UK supplies (customers of all sizes and from all industry groups source from importers and/or switch)
  - Customers relying entirely on UK supplies did not pay more (i.e. no evidence of market power for the "UK duopoly" resulting in higher prices for "UK only" customers pre-merger)
  - Commission verified by talking to customers
- **Commission also benefitted from data provided by importers, showing a significant response to outages at UK production facilities (not visible from public data)**

The INEOS/Kerling case

Evidence of customers switching to importers wholly/partly

Company A: volumes taken from merging firms over time



Synthesised data – example only

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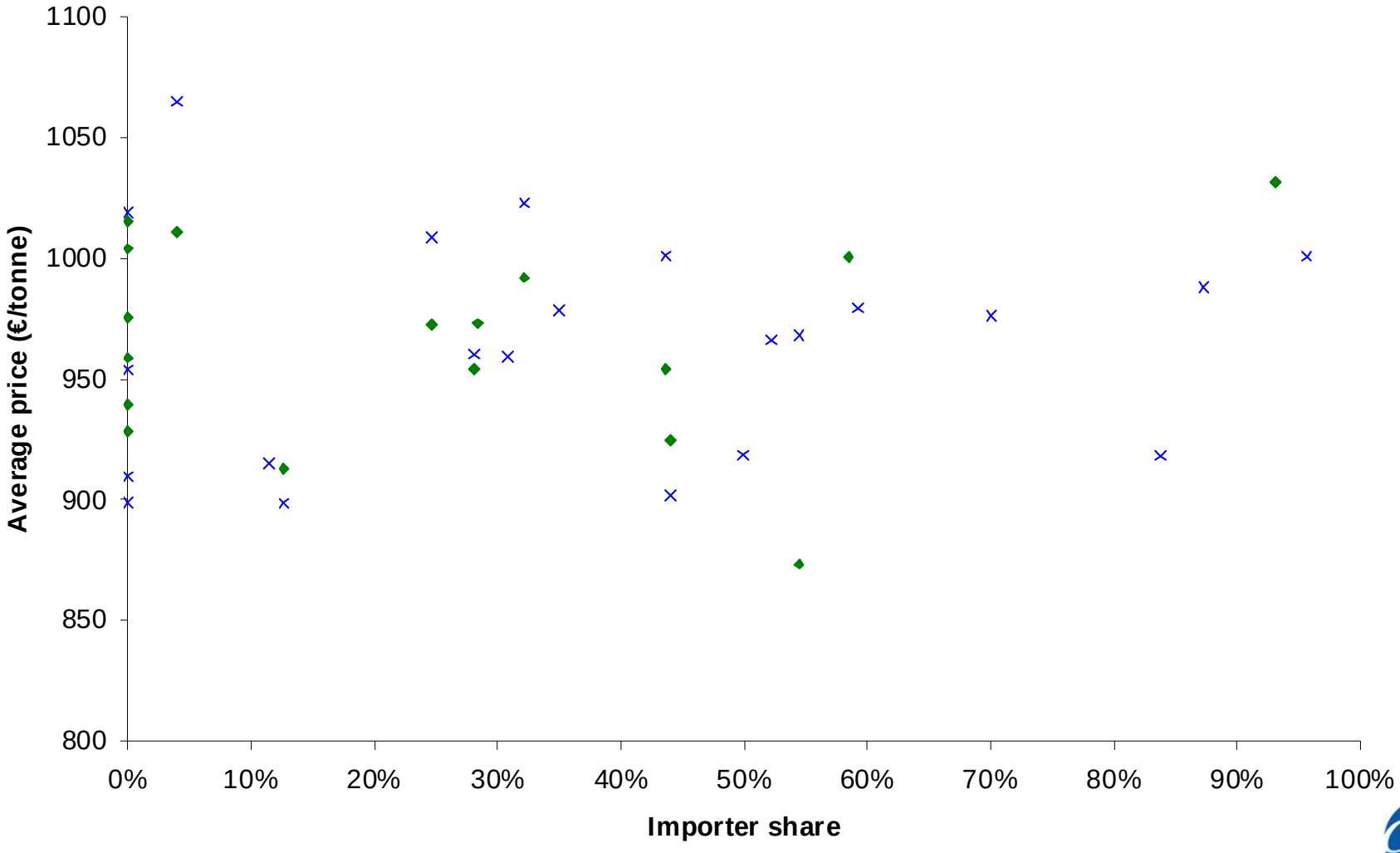
The INEOS/Kerling case

No evidence of price discrimination against those not using importers



Synthesised data – example only

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Conclusions

Practical implications of recent practice

- **Role of economics continues to grow in importance (and resource requirements) – particularly in unilateral and vertical cases**
- **Authorities' economist teams are increasingly approachable**
  - "Economist to economist" meetings can be a useful tool to flush out potential issues/disagreements as early as possible
- **There is an ever increasing emphasis on estimating elasticities**
  - Increases data requirements in terms of sheer volume and complexity
  - Also creates a focus on "economic equivalence" which can be difficult to achieve in practice
  - May be necessary to get into detailed transaction data increasingly early
- **Pricing analysis is "out of fashion"**
  - In some cases even a poor pricing analysis can result in Phase I clearance
  - More often it will only be accepted in the context of a strong story on shocks
  - More readily accepted when demand estimation is unsuccessful
- **Detailed customer analysis can also be decisive**

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