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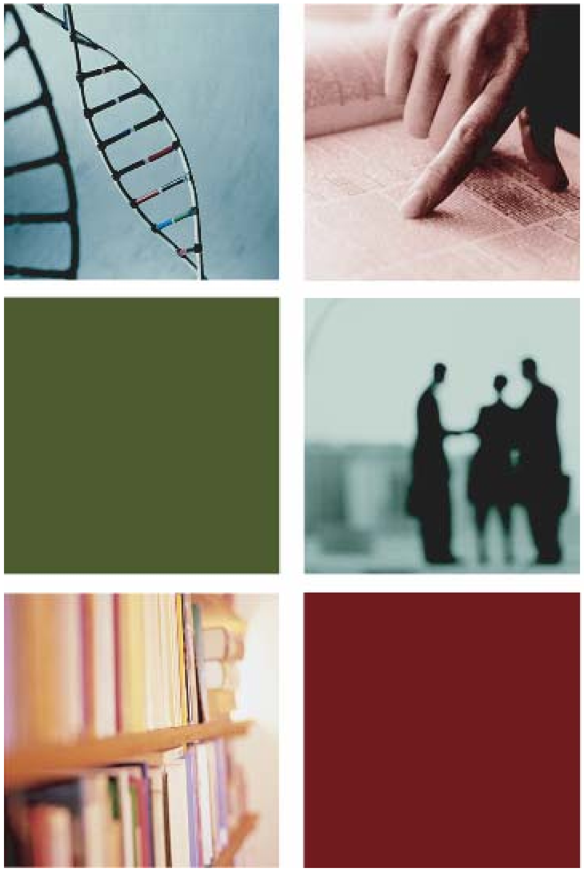

Nice Theory But Where’s The Evidence: The Use of Economic Evidence to Evaluate Vertical and Conglomerate Mergers in the US and EU

Dr. Mary Coleman
Managing Director
LECG

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Overview

- **Brief description of primary vertical theories of potential competitive concern from a merger**
  - Input foreclosure
  - Customer foreclosure
- **Elements for a vertical theory to be plausible**
  - Ability to foreclose
  - Incentive to foreclose
  - Foreclosure is likely to harm competition
  - Efficiencies do not offset
- **Evidence related to each element**

Vertical Theories

- **As noted by the EU in their draft Guidelines, the two main theories of competitive harm related to vertical mergers are**
  - Input foreclosure (upstream)
  - Customer foreclosure (downstream)

- **Input foreclosure: Firms with large upstream positions deny access to or increase of a key input to rival downstream firms, restricting competition downstream.**

- **Customer foreclosure: Firms with large downstream positions do not purchase key inputs from rival upstream firms, restricting competition upstream.**

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Elements to a Vertical Theory

- **Ability: Can the merged firm restrict access to a key input or a customer**
  - Do rival firms have other options?
  - Is there something unique offered by the merged firm for at least some group of downstream or upstream rivals that would make shifting costly?

- **Incentives: Is foreclosure likely to be profitable?**
  - What profits does the firm lose through a foreclosure strategy?
  - What profits might it gain?
  - What are the relative probabilities of gains versus losses?

Elements to a Vertical Theory

- **Competition Impact: Is output likely to be lower, prices higher and innovation reduced?**
    - Must show likely harm to competition, not just to competitors
    - What fraction of the market is likely to be impacted?
    - Would foreclosure impact rival competitiveness?

- **Efficiencies: Are efficiencies likely to offset competitive harm**
    - Vertical mergers are likely to generate efficiencies
    - Efficiencies are often more likely where potential for vertical concerns are greater
    - Can double marginalization concerns yield significant potential benefits?
    - Will products be improved due to alignment of incentives and better ability to work together?

Evidence Related to Efficiencies: Double Marginalization

- **What are shares at each level?**
- **What are margins?**
  - High margins are common in high technology industries
- **How is pricing structured?**
  - Do contracts already account for this (i.e, two-part tariffs)?
  - What barriers might there be to such contracts?
  - Does the input price have a significant impact on downstream pricing?
- **Evidence from previous vertical mergers**

Evidence Related to Efficiencies: Developing Improved Products

- **In high tech industries, development of new or improved products frequently requires coordination at different levels of the industry**

- **Integration can potentially make coordination faster, more effective and less costly**
    - Align incentives
    - Improve information flow
    - Focus efforts

Evidence Related to Efficiencies: Developing Improved Products

- **Information on expected product developments and components to product development**
- **Coordination problems or incentives alignment information**
- **Details on how merger will improve coordination and speed or improve products**
- **Examples:**
  - Synopsis/Avant! – development of seamless integration of different components of programs that design computer chips
  - TomTom/TeleAtlas – development of better maps and device for personal navigation systems

Evidence re: Ability to Foreclose

- **Develop information on existing alternatives**
  - What other potential suppliers or customers exist?
  - What shares do they have?
  - How are the alternatives differentiated?

- **What are existing relationships**
  - Are the two merging parties already substantial customers/suppliers for each other
  - What suppliers or customers do rivals use?
  - Is there evidence of significant switching in the past?
  - How easy is it to switch?
  - Are other firms vertically integrated?

- **How easy is entry**
  - Can customers or suppliers sponsor entry?
  - How readily can firms vertically integrate?
  - Analysis of the profitability of entry

- **Past examples of vertical integration**
  - Are they comparable?
  - What has happened?

Evidence re: Incentive to Foreclose

- **Comparison of Profits at each level**

- **What type of foreclosure would be needed?**
    - Price increases / quality decreases
    - Cease supply or purchases

- **What gain is plausible?**
    - Is a price increase in the foreclosed level likely?
    - What factors influence pricing?
    - How important is the input or access to the merged firm as a customer?
    - How elastic is demand for the downstream product?
    - How much share increase is possible?
    - What factors influence customer purchase choices
    - How important is the input or access to the merged firm as a customer?
    - Could the merged firm extract all its rents at one level? What factors suggest this is or is not plausible?

- **What are the risks**
    - How likely is the gain?
    - How certain is the loss?

- **Evidence from "natural experiments" – variations in vertical integration over time or across areas**
    - How do vertically integrated firms behavior relative to non-integrated firms

Evidence re: Potential for Competitive Harm

- **Will significant competition remain?**
  - What fraction of the market is foreclosed?
  - How important is competition from the firms who might be foreclosed?
  - How readily can firms who are not impacted by foreclosure expand?

- **How much harm would be caused to the foreclosed firms?**
  - How important is the input or access to the customer?

- **Is overall output likely to fall?**
  - What expansion is likely by the merged firm?
  - Is a price increase plausible and over what time frame?

- **How quickly is technology changing?**
  - Is a key input or customer likely to remain so over time?

- **Natural Experiments**
  - What has happened to pricing and output following vertical integration

Example: Synopsis/Avant! v. Cytec/Digene

- **Synopsis / Avant!**
  - Components of software used to design computer chips
    - Synopsis “front end tools” – 90% share
    - Avant! “back end tools” - 40% share
  - Issue: would Synopsis have the incentive and ability to make it harder for Avant! competitors to interact with the Synopsis product?
  - Evidence:
    - Synopsis already integrated with other competitors / could harm customer relationships to change
    - Benefits from strategy unclear
    - Efficiencies highly likely

Example: Synopsis/Avant! v. Cytec/Digene

- **Cytec / Digene**
  - Tests used to diagnose cervical cancer (HPV used after an abnormal Pap result):
    - Cytec: liquid based Pap tests – 93% share
    - Digene: HPV tests – only supplier
  - Issue: would Cytec have the ability and incentive to limit access to its only competitor and other potential competitors in Pap tests?
  - Evidence:
    - Access to cost competitive HPV tests was important for sales of Pap tests
    - Pap test sales substantially greater than HPV test sales
    - Cytec's position in Pap tests was threatened
    - Potential horizontal concerns as well
    - Limited potential efficiencies

Conclusion

- Theory is not enough – evidence is needed to show competitive harm
- Efficiencies must be considered – not just double marginalization but developing better products