ICN Mergers Workshop 2018

Nuts and bolts of vertical merger review
Nuts and bolts of vertical mergers

- Introduction to vertical theories of harm and main concepts
- Essilor/Luxottica: example of basic analysis of vertical theories of harm
- UTC/Goodrich: example of more complex analysis with ability, incentives and effects framework
Why competition agencies may investigate vertical mergers

- Vertical mergers do not involve a direct loss of competition between firms in the same market (like horizontal mergers).
- They also have the potential to create efficiencies such as reduced production and internal organisational costs.
- So why look at them?
  - Some vertical mergers can weaken rivalry, leading to anticompetitive effects as a result of foreclosure of competitors (when the merged firm uses its existing market power in one market to increase its market power in another linked market).
Background to vertical mergers

- Vertical mergers are between firms at different levels of the supply chain.
What are the main theories of harm?

1. Upco competes less aggressively
2. Upco’s rivals gain market power
3. Downco’s rivals may face higher input costs
4. Upco supplies Downco at cost. Downco gains share from its rivals

The final price is determined by the relative strengths of efficiency and cost raising effects

Consider **Ability, Incentive**, to foreclose and whether **Effect** is Detrimental to customers

Source: Parker and Majumdar (2016)
What are the main theories of harm?

Customer foreclosure

1. Upco and Downco merge

2. Downco withdraws purchases from Upco’s rivals, but may gain lower input prices

3. Upco’s rivals are denied important scale economies

4. Downco’s rivals may face higher input costs

The final price is determined by the relative strengths of efficiency and cost raising effects

Consider Ability, Incentive, to foreclose and whether Effect is Detrimental to customers

Source: Parker and Majumdar (2016)
The role of efficiencies

- Vertical mergers have the potential to create efficiencies due to the complementary nature of the upstream and downstream products or services.

- The key types of efficiencies include:
  - Removal of double marginalisation
    - A vertical merger allows the merged entity to internalise any pre-existing double mark-ups
  - Improved coordination between upstream and downstream
    - Mitigation of the hold up problem
    - Elimination of free riding
    - Other coordination efficiencies e.g. manufacturers can share information regarding market conditions and promotional plans

- To overcome any adverse outcomes, these efficiencies will need to be passed on to customers.
Essilor/ Luxottica
Parties – Essilor

- Publicly-listed, headquartered in France
- Active in the manufacture and wholesale distribution of ophthalmic lenses, as well as optical instruments, machines and consumables for eye-care professionals and lens manufacturers
- Also active in the manufacture and sale of some eyewear and online retail sales (10% revenues)
- Worldwide turnover of €7.1bn, EU turnover of €1.8bn.
Parties – Luxottica

- Controlled by a Luxembourg-based holding company (62.549% shareholding).
- Designs, manufacturers and distributes eyewear (prescription frames and sunglasses), which includes brands such as Ray-Ban and Oakley, as well as licensed brands such as Armani, Burberry, Prada.
- Has a retail network focused in the US, with some stores also in Italy (S&V) and the UK (David Clulow). Limited activity in wholesale of lenses.
- Worldwide turnover of €9.1bn, EU turnover of €1.5bn.
The investigation

- **Multijurisdictional investigation**: Australia, Brazil, Canada, Chile, Colombia, EC, India, Japan, Korea, Mexico, Morocco, New Zealand, Russia, S. Africa, Singapore, Taiwan, USA, China and Turkey

- Transaction raised horizontal, vertical and conglomerate theories of harm

- Vertical theories of harm easily dismissed based on market share analysis and assessment of available alternative suppliers
# Commission investigation

<table>
<thead>
<tr>
<th>Theory of Harm</th>
<th>Product market</th>
<th>Geographic market</th>
<th>Comments</th>
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</table>
| Input and customer foreclosure | Ophthalmic substrate and lenses production          | EEA/ National     | Sufficient alternative suppliers of ophthalmic substrate  
Luxottica low share in lenses                                                                                      |
| Input and customer foreclosure | Ophthalmic machines and lenses production           | EEA/ Worldwide     | Sufficient alternative suppliers of ophthalmic machines and consumables  
Luxottica low share in lenses                                                                                      |
| Input foreclosure              | Raw material/ frames and sunglasses/plano lenses    | EEA               | Essilor low share in sun plano lenses  
Existence of sufficient alternative suppliers                                                                       |
| Customers foreclosure          | Ophthalmic lenses and retail activities             | National          | Luxottica has limited optical retail activities  
Sufficient alternative lens suppliers                                                                                   |
| Customer foreclosure           | Ophthalmic machines and retail activities           | EEA/ National     | Luxottica has limited optical retail activities                                                                 |
| Input and customers foreclosure| Frames and sunglasses and retail activities         | EEA/ National     | Luxottica market leader for the supply of frames and sunglasses to downstream optical retailers  
Essilor has limited online only retail activities                                                                               |
Framework used by CCB in the assessment of vertical TOH

Less aggressive competition

Wholesalers supply inputs at higher prices

Rival retailers charge higher price

Customers divert to merged firm in downstream

Merged firm has ability to earn additional retail margin
Merged firm has ability to earn additional wholesale margin

Rival retailers purchase inputs from merged entity upstream

Less aggressive competition

Framework used by CCB in the assessment of vertical TOH
Key Observations

- Insignificant market share of Luxottica
- Import driven market
- Absence of regulatory and technological entry barriers
- Availability of sufficient alternatives

Accordingly, CCI unconditionally cleared the transaction.
Essilor/Luxottica: Outcome in other jurisdictions

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Status</th>
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<tbody>
<tr>
<td>Australia</td>
<td>Cleared unconditionally</td>
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<tr>
<td>Brazil</td>
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<tr>
<td>Chile</td>
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<tr>
<td>China</td>
<td>Cleared with remedies</td>
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<td>Colombia</td>
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<td>Taiwan</td>
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<tr>
<td>Turkey</td>
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</tr>
<tr>
<td>USA</td>
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</table>
Parties – UTC

- Publicly-listed, headquartered in US
- Active in the production of a broad range of high-technology products and support services for the building systems and aerospace industries worldwide
- Worldwide revenue of €42.9bn in 2011
Parties – Goodrich

- Publicly-listed, headquartered in US
- Active in the production and sale of systems and services to the aerospace, defence and security industries on a worldwide basis
- Worldwide revenue of €5.2bn in 2011
The investigation

- Multijurisdictional investigation: Canada, China, EU, US
- Transaction raised horizontal and vertical theories of harm.
- Vertical theories of harm were one of the main focuses of the case. Remedies were required to address vertical concerns in a variety of jurisdictions.
- There was close cooperation between (at least) the US, EU and Canada.
EU: Theory of Harm

Engine controls and small aircraft jet engines

Input foreclosure

Engine Controls
- Goodrich is involved in the supply of engine controls

Aircraft engines
- UTC is active in the market for jet engines for smaller aircraft
- Honeywell and Williams are Goodrich customers and competitors of UTC

Goodrich

UTC

Honeywell and Williams

Honeywell and Williams are Goodrich customers and competitors of UTC
Commission concluded that merged entity would have the ability and incentive to foreclose rival jet engine manufacturers and that customers would be negatively impacted.

**Ability**
- Goodrich’s customers included UTC’s main competitors
- Engine controls were important engine inputs
- Switching to other engine control suppliers would be costly and lengthy

**Incentive**
- Upstream losses would be compensated by downstream gains
- Merged entity was unlikely to suffer reputational damage from engaging in foreclosure strategies

**Effect**
- Potential for reduced choice, increase prices and reduction in quality for customers

**Remedy**
- Structural remedy imposed: UTC agreed to divest Goodrich’s business in engine controls for small aircraft jet engines.
Fuel nozzles and large commercial aircraft jet engines

EU: Theory of Harm

Goodrich is involved in the supply of fuel nozzles

UTC is active in the market for jet engines for large commercial aircraft

Rolls Royce was a competitor of UTC and relied on Goodrich to develop a new type of fuel nozzle
Fuel nozzles and large commercial aircraft jet engines

Commission concluded that merged entity would have the ability and incentive to foreclose Rolls-Royce and that customers would be negatively impacted.

**Ability**
- New fuel nozzle was a crucial input for future large commercial aircraft engines
- Switching to other suppliers would be costly and lengthy
- It would not have been easy for Rolls-Royce to monitor Goodrich’s compliance with the contract

**Incentive**
- Upstream losses would be compensated by downstream gains and by saved costs in relation to the cancelled R&D project
- Merged entity was unlikely to suffer reputational damage from engaging in foreclosure strategies

**Effect**
- Potential for reduced choice, increased prices and reduction in quality for customers

**Remedy**
- Contractual arrangement: Rolls-Royce was offered an option to acquire Goodrich’s lean-burn fuel nozzle R&D project
Vertical theory of harm considerations

- Ability
  - Market structure
  - Facts of the case

- Incentive
  - Is it profitable?
  - Compare profits from diverted sales, efficiencies, and lost sales from foreclosing

- Effects (likely substantial lessening or prevention of competition)
  - Effective remaining competitors
  - Barriers to entry

- Vertically integrated firm may gain access to competitively sensitive information
  - Consider whether access to information could negatively impact competition
UTC/Goodrich: Outcome in other jurisdictions

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<th>Outcome</th>
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<td>China</td>
<td>Cleared with remedies: remedies unconnected with vertical concerns</td>
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<tr>
<td>United States</td>
<td>Cleared with remedies: same remedies as in EU</td>
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</table>
Bayer/Monsanto

- Acquisition of the complete shareholding of Monsanto by Bayer
- Agrochemicals and seeds business
- Seed industry - Two-stage market

*Firstly*, development of new variety for each crop *via* breeding (development of parental lines which are crossed to create hybrids) – ‘Upstream’ and

*Secondly*, the commercial production and commercialisation of those hybrids – ‘Downstream’
Vertical Overlaps

*Upstream market for licensing of Bt. trait for cotton seed*

- Monsanto licensed its two gene Bt. Trait to various seed companies
- Monsanto had a strong position in Bt. Trait (insect resistance trait) with 97% market share.
- Other competitors have single gene trait which is less effective against pests
- Competitors like JK Agri Seeds, Nath Seeds, *etc.* also licenses from Monsanto
- Bayer was an important potential competitor with two gene insect resistance traits in Cotton
Bayer/Monsanto

_Downstream market for commercialization of Bt. cotton seed_

- Both Monsanto and Bayer were operating in downstream market
- Monsanto also had 26% equity stake in another downstream player

Pending antitrust investigations

- Multiple cases under investigation against Monsanto in relation to abuse of dominant position and anti-competitive agreements (for e.g. unfair & discriminatory conditions, excessive pricing, leveraging, etc.)

- Monsanto had terminated licensing agreement with few important sub-licensees in the downstream market which could have changed the market dynamics going forward.
Input foreclosure

• The downstream seed companies were absolutely dependant on the upstream technology provider *i.e.* Monsanto

• Monsanto had the capability and incentive of excluding competitors in the downstream

• Given that Bayer was one of the potential competitors in the upstream market, the Proposed combination was reinforcing the ability and incentive of combined entity to foreclose the market

• Termination of licensing agreement of many of the major downstream player would also have resulted in significant detrimental effect in the market

• Regulatory approval for GM crop is a time consuming process with time period of 7-9 years. Potential competitor Dow, MetaHelix may not be able to enter soon.

• **The Commission concluded that the Parties would be in a strong position to foreclose the upstream market**