Non-horizontal mergers

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*The views expressed are those of the author and do not necessarily reflect those of the European Commission.

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1. Introduction

Definitions:

- **Horizontal merger**: a merger between companies that are actual or potential competitors in the same relevant market.

- **Vertical merger**: a merger between companies that have an actual or potential supplier-customer relationship.

- **Conglomerate merger**: a merger that is neither purely horizontal nor purely vertical.

2. Vertical mergers

- Examples of a vertical relationship:
  - producer and retailer
  - car parts producer and car producer
  - cement producer and concrete producer
  - gas supplier and electricity producer

- Vertical mergers have implications which differ from horizontal mergers: a horizontal merger is a merger between competitors, whereas a vertical merger is a merger between players that are *complementary*.

  - Vertical merger does not lead to a loss of direct competition between the merging parties.
  - Substantial scope for efficiencies (because of complementarity).
Theory of the firm

- What decides the boundaries of a firm?
  - To get a final product/service to the final customer requires a number of sub-products and sub-services
  - Which of these activities should a firm do themselves and which should be left to the market?

- Market based transaction
- Internal transfer

Theory of the firm (2)

- Advantages of being independent:
  - External pressure from competition keeps each entity “on their toes”
  - Easier to manage smaller entities
  - Better focus on core activities
  - ...

- Advantages of being integrated
  - Easier to align activities
  - Internalize externalities
  - ...

### Vertical externalities

Before the merger: U and D in a complementary relationship, but acting independently, not taking (full) account of the impact of each other’s decisions on the other party

- Well known problem: “double marginalisation” (when both U and D put a margin on their price, final prices end up too high from the viewpoint of the vertical structure as whole(*)\;\text{É} both U and D have an interest in the other party reducing its price)
- more broadly: considerable scope for efficiencies

\*“What’s worse than a monopoly? Two monopolies!"

### Vertical mergers

There are many reasons why vertical mergers may be good for consumers

- Internal transfers may be better than market based transfers
- Incentives may be better aligned

So what could possibly be wrong with a vertical merger?
**Foreclosure**

**h** Potential concern is that vertical mergers may lead to foreclose of competitors, i.e. affect the ability or incentive of competitors to compete. This, in turn, may result in a negative impact on consumers

- NB. (Terminology) Foreclosure need not lead to the exit of rivals. Rather it refers to “any instance where rival firms’ access to supplies or markets is reduced as a result of the merger, thereby reducing these companies’ ability and/or incentive to compete” (cf. §18 draft EU NHMG)

**h** Two forms:
1. input foreclosure
2. customer foreclosure

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1. **Input foreclosure**

![Diagram of input foreclosure]

- Upstream entity (market power)
- Downstream entity
- Rivals
- Raising rivals cost?
- Reduction of competitive pressure?

É Net effect on consumers?
What about the “single monopoly profit”?! 

Consider an upstream monopoly (e.g. essential facility) 

(U merges with D1) 

h Question: if U is already in a monopoly position, why does it need a merger to increase its profits? (“Chicago critique”) 

“Single monopoly profit” (cont’d) 

Possible answers (= possible incentives to foreclose): 

- M may be hindered in its ability to capture these potential monopoly rents
  - government regulation; 
  - presence of another, less efficient alternative to M (cf. limit pricing); 
  - the inability to commit to selling the monopoly output and not more (cf. patent licensing) 
  - inability to price differentiate 
  - U may not be the only input (variable vs. fixed input proportions) 
- M may want to prevent entry
  - prevent entry by D1 or D2 (vertical integration) 
  - raise entry barriers for outsiders, by making two-level entry imperative 
- if D1 is active in other markets as well and there are demand or cost interdependencies between the M-product and the other markets, it may be worthwhile to team up
An analytical framework

- Examine:
  1. Ability to foreclose
  2. Incentive to foreclose
  3. Likely impact on effective competition

  (in practice, these aspects are often examined together since they are closely intertwined)

- Cf. Draft EU NHMG, ICN Merger Workbook

(i) Ability to foreclose

- Necessary conditions for the merged entity to have the ability to foreclose
  - the input must be important (e.g. in cost terms)
  - merged entity must have market power upstream
    - E.g. other upstream rivals are less efficient, offer less preferred alternatives (product differentiation), cannot expand easily (e.g. capacity constraints)
    - Input foreclosure may also expose downstream rivals to independent upstream suppliers with increased market power
  - Entry barriers upstream

- Possible counter-strategies of downstream rivals
(ii) Incentive to foreclose

- Incentive to foreclose depends on the degree to which it is profitable

- Merged entity faces possible trade-off between
  - profit loss due to no longer supplying to downstream rivals and
  - profit gain due to expanding sales downstream and/or being able to raise price in that market

- Incentive to foreclose may be higher in case
  - Profits upstream are low (compared with downstream)
  - Possibility to expand downstream high
  - Merged entity has high market share downstream

Incentive to foreclose (cont’d)

- (EC context:) The Commission examines both the incentives to adopt foreclosure conduct and the factors liable to reduce, or even eliminate, those incentives, including the possibility that the conduct is unlawful.

  - Relevant factors for assessing legal disincentive (on the basis of a summary analysis):
    - the conduct would be clearly, or highly probably, unlawful
    - the likelihood that the illegal conduct could detected
    - the penalties which could be imposed
(iii) Impact on competition

Focus: any impact on consumers downstream?

- A merger that raises rivals’ costs may hurt other competitors, but does it also hurt competition (consumers)? Raising rival’s cost is one thing, raising the price above the competitive level is another.
  - Input foreclosure more likely to produce significant consumer harm when proportion of foreclosed rivals is high or foreclosed rivals are close competitors
  - Merger may allow merger entity to raise entry barriers

- Countervailing factors: Countervailing buyer power, entry, efficiencies (possible internalisation of double mark-ups; aligned incentives, …)

Time dimension

- When a vertical merger leads to increases in the price at which rivals can obtain inputs, it may impact their variable costs (direct effect) and allow the merged entity to raise price in turn. Consumer harm can occur in the short run.

- When a vertical merger primarily impacts upon the revenue streams of rivals, any impact on consumers is generally more delayed and more uncertain: may depend on a sequence of events (extent to which rivals are induced to exit or to forego expansion in the future, absence of counter-strategies, …)
  - Anticompetitive scenario much more difficult to establish
  - Entails trade-off between (likely) short term consumer benefits and (anticipated) longer term consumer harm
2. Customer foreclosure

Customer foreclosure (cont’d)

- The decision no longer to procure from upstream rivals may raise their costs and/or reduce their revenue streams. To the extent that this reduces their ability and incentive to compete, downstream rivals of the merged entity may be faced with higher input costs (=input foreclosure)

- Analytical framework:
  1. Ability to foreclose
  2. Incentive to foreclose
  3. Likely impact on effective competition

Net effect on consumers?
Customer foreclosure (cont’d)

h Foreclosure by reducing rivals’ customer base bears similarities to raising rivals’ costs scenario, but the competitive harm generally more delayed and more uncertain: may depend on a sequence of events (absence of counter-strategies, reduced investment levels, …)

Other non-coordinated effects

o The merged entity may, by vertically integrating, gain access to commercially sensitive information regarding rivals’ upstream or downstream activities

n For instance, by becoming the supplier of a downstream competitor, a company may obtain critical information, which allows it to price less aggressively in the downstream market to the detriment of consumers.
Coordinated effects

- General principle: Co-ordination more likely to emerge in markets where it is fairly easy to establish the terms of co-ordination and where co-ordination is sustainable
  - Sustainability requires that
    - the companies involved can monitor each other’s market behaviour (market transparency)
    - there is a credible ‘deterrence mechanism’ (disciplining mechanism) to ensure adherence
    - outsiders and customers cannot undermine the co-ordination

- A vertical merger may have an effect on these conditions

3. Conglomerate mergers

- Conglomerate merger: a merger that is neither purely horizontal or purely vertical

Useful distinction:

- Complementary products
  - e.g. printers and cartridges; razor blades and shaving foam; aircraft avionics and aircraft engines; machines and spare parts
- Neighbouring products
  - e.g. whisky and gin; milk and yoghurt; carton packaging machines and PET packaging machines
- Independent products
  - unrelated products
Conglomerate mergers (cont’d)

- Conglomerate mergers generally have no negative effects on competition.
  - No loss of direct competition
  - Efficiencies: Due to specialization through division of labour it is often more efficient that certain components are marketed together rather than separately.
    - Cost savings can derive from some form of economy of scope (either on the production or the consumption side, e.g. one-stop-shop).
    - Value enhancements can result from better compatibility and quality assurance of complementary components
    - Pricing efficiencies

Potential competition concern: foreclosure, as a result of e.g.

- Tying
  - the purchase of one good (the tying good) requires that customers also purchase another good from the producer (the tied good) whenever they need the good

- Bundling
  - the goods are sold as a package only (pure bundling) or as a package in addition to being sold individually (mixed bundling)

- Portfolio effects/range effects
  - sales driven by the preference of customers to procure a variety of products
Conglomerate mergers (cont’d)

- Setting:

  ![Graph of A1 and B1 merging with A2 and B2]

- Analytical framework:
  1. Ability to foreclose
  2. Incentive to foreclose
  3. Effect on competition (consumers)

Bundling/tying: complementary products

- Possible effects of bundling/tying
  - A demand effect
    - Bundling/tying may change the demand for rivals’ products (in terms of volume and elasticity), keeping prices constant
    - “Mixing-and matching” of products no longer possible (pure bundling)
  - A price effect
    - Bundling/tying may go with a change in pricing incentives for the merged firm, further changing the demand for rivals’ products
    - A “double marginalisation” argument applies (“Cournot effect”)
    - “Mixing-and matching” of products no longer possible: changes pricing incentives. Bundling/tying products may be a way to commit to a more aggressive pricing strategy
Bundling/tying of compl. prod. (2)

h Demand & price effects • may reduce revenue streams for rivals, which may reduce their incentive to invest (e.g. in product or process innovation), or to enter the market in the first place

h Other effects in the short run are conceivable too
• Effects on the intensity of competition in the short run: "softening of competition" by segmenting the market; reducing the elasticity of demand of rivals
• Customer harm through a reduction in choice (no mix-and-match)

Challenges

o Need to show:
  o Anti-competitive effect follows directly from the merger (i.e. it is merger specific). The merger can change conduct (i.e. merger specificity – e.g. merger creates bundling opportunity)
  o Future conduct is profitable (i.e. credible & thus likely)
  o Competition is foreclosed or mitigated
  o Consumers are worse off than in the absence of the merger (may entail comparing short run – likely – efficiencies and – anticipated – longer term harm)

  o Unfortunately there does not exist a set of observable factors in a constant and robust association with each of the above steps.
Necessary conditions...

1. Market power in at least one of the components in the tie or bundle (tying good)
2. The market for the other component (tied good) has basic conditions that are conducive to market power. For example it might be imperfectly competitive due to economies of scale.
3. There must be a common pool of customers that is large relative to the pool of buyers for either the tying or the tied good separately.
4. Competitors are unable or unwilling to match the tie or bundle either by counter-merger or teaming-up with each other.

Foreclosure – neighbouring products

- Neighbouring products: the products may not be complements, but feature a demand side link in that they are bought by a common pool of customers
- Demand-side link provides scope for leveraging market power, i.e. increasing sales in one market by coupling sales to the other market through bundling/tying
  - Difference with complementary products: no “Cournot effect”
- Effects bear similarities to customer foreclosure;
  - emphasis is on causing revenue shortfalls for rivals;
  - effects on the intensity of competition in the short run are possible too
Portfolio effects

- Portfolio effects/range effects: sales driven by the preference of customers to procure a variety of products
  - e.g. software varieties with hardware; one-stop shop principle for procurement

- Foreclosure effects not so much from bundling/tying (i.e. things imposed by the producer), but rather from the “one-stop shop“/variety element

- Foreclosure through portfolio effects bears similarities to customer foreclosure
  - emphasis is on causing revenue shortfalls for rivals;
  - effects on the intensity of competition in the short run are possible too

4. Concluding remarks

- Foreclosure concerns:
  - scenarios of raising rivals’ cost more likely to be of concern when they result in direct upward pressure on competitor’s prices
  - anti-competitive scenarios involving reducing rivals’ revenues less pervasive, but possible. Difficulty with distinguishing it with “competition on the merit”. May entail comparing short run (likely) efficiencies and (anticipated) longer term harm