Module 7: FTC / DOJ Merger Guidelines

Market Organization & Public Policy (Ec 731) · George Georgiadis

- The DOJ and FTC have issued guidelines outlining the method they would follow for evaluating horizontal mergers.
- Typically, once the DOJ or the FTC announce that they will seek to block a merger, few firms decide to incur the costs required to fight in court.
- The evaluation process consists of four basic steps:

  1. Market definition
  2. Calculation of market concentration and concentration changes
  3. Evaluation of other market factors
  4. Pro-competitive justifications

Market Definition

- Suppose that two merging firms produce widgets.
- The DOJ / FTC will ask the following question: ("SSNIP test")

  Would a hypothetical profit-maximizing monopolist of widgets impose at least a small but significant and non-transitory increase in the price of widgets given the premerger prices of other products?

  – This "small but significant increase in price" is taken to be 5%.
  – If the answer is "yes", then widgets is taken to be the relevant market.
  – If the answer is "no", then the agencies add the next closest substitute product (i.e., the product that would gain the most sales as a result of a 5% increase in the price of widgets), and ask the question again for this new larger potential market.
  – This process continues until the answer to this question is "yes".

- The idea is to arrive at a "relevant market" of products in which a merger potentially could have an anti-competitive effect.
- In many cases, the merging firms will produce multiple products.
  - In this case, the agencies will follow the same procedure for each product they produce.

Calculating Concentration and Concentration Changes

- Once the DOJ / FTC has defined the relevant market, the next step is to calculate the pre-merger concentration levels.
  - *i.e.*, the pre-merger market share of the firms.
- Using the pre-merger shares $(s_1, ..., s_N)$ (measured in %), the agencies will calculate:
  - *Pre-merger Herfindahl-Hirschman Index*: $HHI_{pre} = \sum_i s_i^2$
  - *Post-merger Herfindahl-Hirschman Index*: $HHI_{post} = \sum_i s_i^2 - s_1^2 - s_2^2 + (s_1 + s_2)^2 = \sum_i s_i^2 + 2s_1 s_2$
  - Change in the *Herfindahl-Hirschman Index*: $\Delta HHI = HHI_{post} - HHI_{pre} = 2s_1 s_2$
- These measures place the merger in one of the following categories:
  1. $HHI_{post} < 1000$: These mergers are presumed to raise no competitive concerns.
  2. $HHI_{post} \in (1000, 1800)$:
     - If $\Delta HHI < 100$, then the merger is unlikely to be challenged.
     - If $\Delta HHI > 100$, then the merger "potentially raises significant competitive concerns", depending on consideration of other factors.
  3. $HHI_{post} > 1800$:
     - If $\Delta HHI < 50$, then the merger is unlikely to be challenged.
     - If $\Delta HHI \in (50, 100)$, then the merger "potentially raises significant competitive concerns", depending on consideration of other factors.
     - If $\Delta HHI > 100$, then it is presumed that the merger is likely to be anti-competitive without evidence showing otherwise.
- What do these numbers mean?

- In a symmetric oligopoly, $HHI = \frac{10{,}000}{n}$.
  - An index of $HHI = 1000$ corresponds to 10 equal-sized firms.
  - An index of $HHI = 1800$ corresponds to 5.6 equal-size firms.
- A change of 50 in the HHI index would be caused by the merger of two firms with 5% market share.
- A change of 100 in the HHI index would be caused by the merger of two firms with $\sim$ 7% market share.

- In practice, the DOJ / FTC are more lenient than these numbers suggest.

Evaluation of Other Market Factors

- Structural factors affecting the ease of sustaining collusion
  - Generally, the DOJ / FTC are more concerned about mergers in markets in which collusion is easier to sustain.
- Capacity limitation of some firms in the market
  - If a rival is capacity constrained, then one would expect it to be less of a force in constraining any post-merger price increase.
- Ease of Entry
  - The DOJ / FTC ask whether in response to a 5% price increase, entry would be likely to occur within two years that would drive price down to its pre-merger level.
- Evidence of market performance
  - The DOJ / FTC often consider empirical evidence showing how the level of concentration in such market affects competitive outcomes.
- Substitution patterns in the market, as well as between products in and out of the market
  - The DOJ / FTC will ask whether the merging firms are closer substitutes to each other than to other firms in the market.

Pro-competitive Justification

- The issue here is whether and to what degree a merger increases efficiency.
  - *e.g.*, to what degree the merged firm's marginal costs will be lower than the pre-merger marginal costs.
- The DOJ / FTC typically adopt a fairly high hurdle for claimed efficiencies, because it is easy for firms to claim that efficiencies will be generated by the market, and hard for the antitrust agencies to evaluate the likelihood that these efficiencies will be realized.
- One concern in mergers that claim significant operating efficiencies (*e.g.*, through reductions in manpower or capital) is whether these reductions alter the quality of the products produced by the firms.
  - If this is the case, then such savings are not valid efficiencies from an antitrust standpoint.

References

Whinston M.D., (2008), *Lectures on Antitrust Economics* (Cairoli Lectures), MIT Press.