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## Structural Factors that Facilitate Anticompetitive Behavior: Providing a Useful Context in Antitrust Cases

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### Introduction

Certain structural factors, when present in a given market, can facilitate anticompetitive behavior. Recognizing the presence of these factors and understanding their significance offers valuable insight when evaluating potentially anticompetitive activity in specific markets.

In this article, we discuss ten factors that, although not exhaustive, provide a useful starting point for contextualizing the competitive environment of a given market and providing a general framework within which to evaluate the specific data related to that market.

### Ten Structural Factors that Facilitate Anticompetitive Behavior

We have identified ten factors that, when taken into consideration as a whole, describe the conditions that make markets most susceptible to anticompetitive behavior. These factors are:

1. High Market Concentration;
2. Barriers to Entry;
3. Low Demand Elasticity;
4. Demand Stability;
5. Links Among Competitors;
6. Market Symmetry;
7. Potential for Multi-Market Contact;
8. Order Frequency and Regularity;
9. Buyer Power; and
10. Product Homogeneity.

#### ***1. High Market Concentration***

Market concentration refers to the extent to which market share is concentrated among a small number of firms. Collusion is increasingly likely to occur as the number of firms controlling a market shrinks.<sup>1</sup> There are two reasons for this tendency. First, it is easier for a few firms to

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<sup>1</sup> See Motta, Massimo. *Competition Policy: Theory and Practice*. Cambridge: Cambridge University Press (2004) at 142.

coordinate their behavior than it is for many to do so.<sup>2</sup> Second, a market with fewer firms gravitates toward a collusive outcome because the relative gain from deviating from a such an outcome is smaller than it would be with a larger number of firms.<sup>3</sup>

One way to quantify the concentration of a given market is to calculate the Herfindahl-Hirschman Index (“HHI”), a widely accepted indicator of market concentration that is used by the U.S. Department of Justice (“DOJ”) and the Federal Trade Commission (“FTC”). The HHI for markets for topical generic drugs, for example, often exceeds 2,500 which, according to the agencies’ criteria, indicates a highly concentrated market.<sup>4</sup>

## **2. Barriers to Entry**

A related economic concept to market concentration is that of barriers to entry. Barriers to entry refer to the obstacles new participants face in attempting to enter a given market. The easier it is “for competitors to enter a given market (i.e., the lower the barriers to entry) the more difficult it is to achieve collusive outcomes.”<sup>5</sup> Conversely, higher barriers to entry facilitate collusive outcomes. Barriers to entry are often linked to market concentration because the harder it is for participants to enter a given market, the more likely it is that a small number of firms will control that market.

As described above, both factors facilitate collusive outcomes. Thus, a market that has high barriers to entry and high market concentration may be particularly conducive to anticompetitive behavior by market participants.

## **3. Low Demand Elasticity**

Market demand elasticity refers to the responsiveness of the quantity demanded of a particular good to the price of that good. An inelastic good (i.e., one with low demand elasticity) is one for which even a large price increase will not trigger a significant reduction in total orders by customers in the market.

Low demand elasticity increases the potential gains from a collusive price increase because firms in the market know that normal market reactions to price increases (i.e., a reduction in demand) will be muted. Thus, when evaluating the potential for anticompetitive behavior in the market for a particular good or service, it is useful to consider whether price increases for that good or service are typically met with significant reductions in overall use. If not, the market may be characterized by low demand elasticity, rendering that market prone to anticompetitive behavior.

## **4. Demand Stability**

Apart from inelasticity, the stability of the demand for a particular product may also play a role in sustaining collusion.<sup>6</sup> In the absence of stability of demand, such as in a market that experiences frequent demand shocks, it might be difficult for firms to determine whether poor sales are due to

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<sup>2</sup> See *id.* at 143.

<sup>3</sup> *Id.*

<sup>4</sup> “Herfindahl-Hirschman Index.” *The United States Department of Justice* (July 31, 2018). <<https://www.justice.gov/atr/herfindahl-hirschman-index>> (accessed Apr. 29, 2021).

<sup>5</sup> See Motta, Massimo. *Competition Policy: Theory and Practice*. Cambridge: Cambridge University Press (2004) at 143.

<sup>6</sup> See *id.* at 146.

price undercutting by rivals or demand variability.<sup>7</sup> In such an environment, firms would find it harder to sustain collusion relative to a stable market with few demand shocks.

### ***5. Links Among Competitors***

The potential for collusion is increased when firms have participation or representation in competitor firms, even if such participation is not of a controlling nature.<sup>8</sup> Such participation would naturally facilitate the coordination of pricing and strategies as well as make it easy to monitor the rival's behavior and enforce collusive agreements.<sup>9</sup> Further, a firm with a financial interest in a rival firm, even without any controlling role in that rival's business policies, has a lower incentive to compete, making collusion more likely.<sup>10</sup>

Links between competitors need not be direct, such as the participation or representation of one firm in a rival firm. The nexus can also extend to independent opportunities for information flow. Such opportunities increase the observability of firms' actions, thus facilitating the enforcement of collusive agreements by making it easier to monitor competitors' behavior and coordinate pricing policies.<sup>11</sup>

Depending on the industry, such opportunities can include industry-wide events that facilitate competitor communication, such as conferences or symposiums, as well as other, more informal events which allow the dissemination of pricing information among market participants. Telephone conversations and sharing a drink after hours can offer excellent opportunities for information sharing.

It may also be useful to consider the extent to which employees switch employers within the given industry. Such a flow of employees, particularly at the executive level, can facilitate information flow about competitors' pricing actions, policies, and strategic decisions, thus making collusion more likely.

### ***6. Market Symmetry***

Symmetry across firms (with respect to market share, varieties in the product portfolio, technological knowledge, capacities, or costs) can facilitate collusion because firms in similar positions of market power find it easier to arrive at an agreement that suits them all.<sup>12</sup>

It may be useful to analyze the relevant dimensions across which rival firms may hold similar positions. For instance, a market that is evenly split among a handful of competitors may be more

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<sup>7</sup> *Id.*

<sup>8</sup> *Id.* at 144.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *See id.* at 150-156.

<sup>12</sup> *See id.* at 147.

prone to collusion than a market in which one firm holds a disproportionate market share relative to its competitors.

### ***7. Potential for Multi-Market Contact***

Multi-market contact—firms interacting in more than one market—is another factor that can facilitate collusion.<sup>13</sup> In a situation with multi-market contact, there is typically extensive overlap across markets by the same firms. This facilitates collusion for two reasons.

First, when firms interact with each other in multiple markets, they have increased contact with each other, thereby increasing their collusive opportunities.

Second, when the same few firms participate in multiple markets together, overall market asymmetry between the firms tends to be smoothed out because the relatively large share of a given firm in one market can be counterbalanced by its relatively small share in another market.<sup>14</sup> As mentioned above, market share symmetry across firms makes it easier for firms in similar positions of market power to arrive at an agreement that suits them all.<sup>15</sup> Thus, multi-market contact increases market symmetry, making collusion easier.

### ***8. Order Frequency and Regularity***

Frequent and regular orders of the good being sold in the market tend to facilitate collusion.<sup>16</sup> With respect to frequency, if there is a large time interval between orders, participants may have a greater incentive to deviate from the collusive agreement because the punishment for deviating is delayed and will thus be discounted accordingly.<sup>17</sup> The regularity of orders can also be conducive to collusion because, in the absence of such regularity, unusually large orders provide a strong temptation to deviate from collusive agreements.<sup>18</sup> Thus, a markets in which customers regularly and frequently buy fixed quantities of the given good is more conducive to collusion than a market characterized by sporadic purchases.

### ***9. Buyer Power***

The degree of concentration of buyers can have an impact on collusive potential in a given market. A strong buyer can use its bargaining power to stimulate competition among firms, thus rendering collusive agreements less likely.<sup>19</sup> As discussed above, large, infrequent orders may provide temptation for a firm to deviate from a collusive agreement. A strong buyer that can place such

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<sup>13</sup> *See id.* at 148.

<sup>14</sup> *See id.* at 149.

<sup>15</sup> *See id.* at 147.

<sup>16</sup> *Id.* at 145.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

orders may therefore also have the potential to break an existing collusive agreement by inducing suppliers to deviate.<sup>20</sup>

### ***10. Product Homogeneity***

Product homogeneity refers to the degree to which the products sold by rival firms in the market are interchangeable or similar to one another. In the absence of product homogeneity, a collusive agreement may be difficult to maintain because competition could then center on non-price factors<sup>21</sup> and it would be harder to punish a firm, through price reductions, for deviating from the collusive agreement.<sup>22</sup>

At the same time, in the absence of product homogeneity, a deviation from the collusive agreement may be less profitable because the deviating firm would not expect to gain considerable market share from rivals unless it cut its price drastically.<sup>23</sup>

Thus, though product homogeneity may have important ramifications for collusive potential, studying the impact of this particular structural factor requires deeper analysis into the given market. For instance, in a situation where firms sell different product variants, as opposed to a single well-defined product, greater product homogeneity might be likely to facilitate collusion.<sup>24</sup> Analyzing the specific product and market is thus necessary to gain a better understanding of how product homogeneity impacts collusion in that particular market.

### **The Role of Experts in Analyzing Structural Factors and Collusion**

The structural factors discussed here are a useful starting point in thinking about identifying a market that is prone to anticompetitive behavior. However, these factors should not be mistaken for a simple checklist. A robust analysis of these factors with respect to a specific market requires careful consideration of quantitative data, such as market share and pricing data, as well as qualitative aspects of the market, such as the dynamics between buyers and firms. This is where the expertise of a professional who is familiar with economics and/or the specifics of the market being analyzed can be crucial.

An expert who understands the economics behind these structural factors will be best able to use a comprehensive body of data about the relevant market and produce meaningful insights about the collusive potential of the market. Such expertise is particularly important in ambiguous or borderline cases where it may be challenging to determine whether observed outcomes are attributable to a collusive agreement or, rather, are the natural result of competitive forces playing out.

**For additional inquiries, please contact [info@vegaeconomics.com](mailto:info@vegaeconomics.com).**

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<sup>20</sup> *Id.*

<sup>21</sup> Frass, Arthur G., and Douglas F. Greer. "Market Structure and Price Collusion: An Empirical Analysis." *The Journal of Industrial Economics*(1977): 21-44 at 38.

<sup>22</sup> Motta, Massimo. *Competition Policy: Theory and Practice*. Cambridge: Cambridge University Press (2004) at 146.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*