

Chapter 7

Does the High Market Share of a Few Companies Imply Market Power?

I do not suggest that we abandon the search for private conspiracy, but I do think that it is time to pay much less attention to the structure of industry and virtually no attention to the notion of nongovernmental barriers to entry. A commitment to the machinery of competitive organization requires that we generally accept the consequences of effective competition. For antitrust, this means that market share and profits can be expected to shift in favor of successful rivals.

— Harold Demsetz (1989), “Two Systems of Belief About Monopoly,” p. 110.

Governments in countries with advanced economies typically have laws ostensibly designed to prevent anti-competitive behaviour by private sector businesses, and also have agencies to enforce the relevant legislation. These laws are generally referred to, especially in the United States, as antitrust laws.

In Canada, the federal government’s Competition Bureau investigates potentially anti-competitive business behaviour and determines whether a case against the behaviour should be brought before the competition tribunal. The latter is an administrative body consisting of a judge and lay experts who hear and decide cases brought by the Competition Bureau.

In the United States, the two main pieces of antitrust legislation are the Sherman Act and the Robinson-Patman Act. The Federal Trade Commission (FTC) and the US Department of Justice (DOJ) enforce federal antitrust laws.

State attorneys-general may also bring federal antitrust suits on behalf of individuals residing within their states or on behalf of the state as a purchaser. Private suitors can also bring antitrust suits. Indeed, law and economics scholar Fred McChesney points out that for every antitrust suit brought by government, private plaintiffs bring ten (McChesney, 2008).

Structure, conduct, and performance

For many decades, the “Structure-Conduct-Performance” (SCP) paradigm¹⁵ dominated antitrust theory and practice. The SCP paradigm basically maintained that if a relatively small number of firms has a large market share, those firms will refrain from competing with each other, particularly with respect to reducing their prices. As a consequence, consumers will pay higher prices and producers will earn higher profits than would be the case if a larger number of firms each had a relatively smaller market share.

The structure of a market in the SCP paradigm was identified by its concentration ratio. The latter is basically a measure of the share of a product or geographic market that is accounted for by the largest firms in that market. Thus, the 4- and 8-firm concentration ratios are the percentage of total revenues earned by all firms producing a specific product or selling their product in a specific location that is accounted for by the 4 and 8 largest firms, respectively.¹⁶ General rules of thumb were used to identify when concentration ratios were “too high.” If they were too high, went the argument, antitrust authorities should prevent additional mergers or acquisitions and should monitor specific business practices that might be anti-competitive.¹⁷ The empirical justification for relying on the SCP paradigm was the statistical observation that profitability in various industries was positively correlated with the industries’ concentration ratios. This led many economists to conclude, without much other evidence, that firms in relatively concentrated markets were likely charging consumers above-competitive prices and reaping “unjustifiably” high profits as a result.

¹⁵ For an overview of this paradigm, see Bain (1968).

¹⁶ A more detailed measure of concentration (the Herfindahl Index) takes into account the market shares of all firms in a market.

¹⁷ A merger occurs when two organizations agree to combine into a single entity. In the case of an acquisition, one organization buys the other organization.

But Demsetz had a different idea. In *A Conversation with Harold Demsetz*, a 2008 interview with UCLA law professor Mark Grady, Demsetz tells of something he heard at the University of Chicago that led him to work he did at UCLA. Someone at the University of Chicago's Quadrangle Club had asserted that the only company making money in the auto industry was General Motors. At the time, GM was by far the largest auto company in the United States. And if the assertion were true, reasoned Demsetz, then the large profits in concentrated industries would be due not to concentration per se but to better performance by the larger firms.

Demsetz decided to delve into this idea by systematically looking at data on profits of large firms in concentrated industries. The result was his 1973 article, "Industry Structure, Market Rivalry and Public Policy." The article suggests that the relationship between profits and larger firms runs in the opposite direction. Under competitive market conditions, he argues, specific firms might develop differential advantages due to innovations that either lower their costs or give their products advantages over other products. Lower costs will lead directly to higher profits for those innovating firms. Superior products would allow innovating firms to charge higher prices than their competitors, which, in turn, would increase the former's profits given that average costs do not increase commensurately. At the same time, the competitive advantages of innovative firms will contribute to increased market concentration as those firms take away market share from their less efficient competitors. In his research paper, Demsetz provided empirical evidence that higher price-cost margins reflect superior efficiency which, in turn, is linked to resulting increased market concentration.

Large firms may also enjoy a competitive advantage over small or medium-sized firms because of economies of scale. These exist when the cost per unit for producing any product declines as a larger number of units is produced. Economies of scale are linked to a number of potential phenomena including increased specialization and learning-by-doing. Increased specialization involves dedicating labour and physical capital to specific tasks, which reduces downtime and other inefficiencies as capital equipment and labour do not need to be relocated or re-tooled to perform alternative tasks. Learning-by-doing refers to efficiency improvements that arise as workers learn through

repeated experience how to perform specific tasks more efficiently.¹⁸ Both economies of scale and learning-by-doing can help explain Demsetz's (1973) empirical findings that large firms in concentrated industries have lower costs than medium and small firms in those industries, while large firms do not have a cost advantage in unconcentrated industries. Large size alone does not give an advantage to companies in a particular industry. If the large size is *not* due to economies of scale or learning-by-doing, the large company has no advantage. Indeed, if the large company has higher costs than small companies, its size will fall because it will lose market share to smaller, more-efficient firms.

The SCP paradigm could be a two-way phenomenon. That is, increased concentration could lead to higher prices associated with limited competition at the same time that the lower costs and other advantages enjoyed by large firms could contribute to increased concentration over time. Both phenomena would result in a positive relationship between concentration and profitability, albeit with much different implications for antitrust policy. Peltzman (1977) helps disentangle the nature of the empirical relationship between concentration and profitability by examining how concentration is related to price on the one hand, and to average cost on the other. In Peltzman's framework, the relationship identified between concentration and price reflects the ability of firms to charge above-competitive prices, while the relationship between concentration and average cost reflects efficiency advantages enjoyed by firms in concentrated industries. Based on his empirical findings, Peltzman argues that a positive relationship between concentration and price can be identified. However, it is dwarfed in statistical importance by the relationship between higher concentration and lower average cost.

Demsetz's famous 1973 paper, buttressed by Peltzman's empirical work, fundamentally overturned the widespread interpretation of the SCP paradigm. In particular, it undermined the conventional wisdom that relatively high levels of industrial concentration signal much weaker competitive behaviour and likely inefficient performance. Indeed, it cautions that precisely the opposite inference might be appropriate in many cases. This insight has been incorporated into the practice of antitrust law. The evaluation of proposed mergers and acquisitions, as well as business practices that

¹⁸ Alchian (1963) was one of the first economists to document the empirical importance of learning-by-doing in his study of the production of aircraft frames.

are identified in law as being potentially anticompetitive, incorporate both a wider range of criteria beyond industry concentration ratios and also take into account the potential for larger firm size to promote increased efficiency.

The important role of transactions costs

Demsetz and Peltzman's work primarily provides empirical evidence challenging the conventional wisdom that antitrust authorities should discourage or prevent mergers and acquisitions because allowing only a smaller number of firms in a market will primarily result in higher prices that hurt consumers. The UCLA School also provides novel theoretical explanations for why mergers and acquisitions could improve economic efficiency, thereby making consumers better off. Klein, Crawford, and Alchian (1975) did seminal research on this idea. They emphasized the role of transaction costs as an important influence on whether people choose to do business with each other as members of a single organization or transact as independent units using contracts or other legal commitments to govern the transactions. The presumption is that they will choose the method of doing business that is most efficient, taking transaction costs into account.

Klein, Crawford, and Alchian noted that one source of transaction costs is "post-contractual opportunism." One party to a set of market transactions might take advantage of another party because of the latter's investments in assets whose use is specialized to the transactions in question. Consider our earlier example of several oil wells that are located along a separately owned pipeline that leads to a cluster of independently owned refineries with no alternative crude supply at comparable cost. Once all the assets are in place—the wells are drilled and the pipeline and refineries are constructed—the oil-producing properties and the refineries are specialized to the pipeline.

The owner of the line of pipe between the oil wells and the refineries has substantial bargaining power, since the cost of constructing a new competing pipeline is quite high. Because the wells have already been drilled, the costs of doing so have already been incurred. That means that the pipeline owner could drive the price it pays for crude oil down to a level that covers the current costs of production but doesn't cover the already-incurred (or "sunk") costs of building the well. At the delivery end of the pipeline, the pipeline owner could demand a higher than agreed-upon price for delivering the crude oil to the refineries, since the refinery owners would find it extremely expensive

to abandon their current refineries and rebuild them elsewhere. Therefore, once the oil producers and oil refiners have made their investments, those investments are essentially hostages to the pipeline owner.

Of course, the owners of the oil wells and refineries would be aware of this risk before making their investments, and they would presumably require some reliable protection against the realization of that outcome. They might, for example, enter long-term contractual agreements with the pipeline owner that lock in the price that the pipeline owner will pay for oil and the price that the pipeline owner will charge refiners for crude oil delivered to them. But the cost of negotiating and enforcing such contracts could be quite high. It might need to allow for contingencies such as temporary reductions in service for maintenance of the pipeline or changes in prices paid for or charged by the pipeline related to changes in costs of operating the pipeline. It would also, of course, need clauses that cover changes in the world price of oil. Identifying and including all potential contingencies into a contract would be time consuming and litigating any disputes would likely be expensive.

Another way of dealing with the hostage problem would be for the oil producers and refiners to minimize the investments they make up front. For example, refiners might build much smaller refineries to minimize the sunk cost investments that could be implicitly grabbed by the pipeline owner. The problem is that smaller refineries would likely be less efficient than large refineries because the former cannot take advantage of economies of scale. Furthermore, with less crude oil needed to be carried to small-scale refiners, both the pipeline and the oil drillers might also operate at a scale that is less than efficient. In short, while costs associated with structuring and enforcing contracts might be reduced, other costs would be higher.

Another way to address concerns about post-contractual opportunism would be common ownership of the stages of the process from oil production through refining. Such common ownership is what economists call vertical integration. Because there would be a single owner of the various stages of the industry from oil production through refining, the incentive of that single owner is to maximize the combined efficiency and profitability of all of the stages taken together, rather than maximizing the profits of any one stage. A merger among the various companies would increase concentration in the oil producing and refinery segments. However, it would also lead to increased

efficiency in those sectors, thereby illustrating Peltzman's point that increased concentration can lead to lower average costs. Furthermore, if the refineries involved in the merger compete against other refineries located elsewhere, the price to consumers need not increase.¹⁹

The UCLA School's main insight is, again, that evaluating transactions carried out in private markets requires the economist to pay attention to real-world conditions. In the case described above, transaction costs may promote mergers and acquisitions because the latter are the most efficient way to address transaction costs even as they reduce the number of independently owned firms competing in a market. Antitrust restrictions on mergers based on the SCP paradigm may, therefore, lead to less efficient outcomes and higher prices for consumers. The School's contributions to a more robust understanding of transaction cost-based motives for mergers were a major intellectual underpinning for a more tolerant attitude on the part of antitrust authorities towards mergers and acquisitions, especially those related to vertical integration.

A recent example is the acquisition of Time-Warner, a large media company that, among other things, owns the CNN cable channel, by AT&T, a very large communications company. The US government sought to block the acquisition on grounds that AT&T would gain substantial market power in supplying entertainment content and would use that power to restrict access that other content distributors (e.g., other cable, streaming, and mobile phone companies competing with AT&T) would have to Time-Warner's products at competitive prices. AT&T argued that the large number of existing producers of programming content meant that Time-Warner enjoyed no power to charge above-competitive prices for its content prior to the acquisition and that the acquisition would not change that condition. It further argued that combining the creation and distribution of entertainment content would improve the quality and variety of programming available to consumers by combining AT&T's knowledge about consumers' viewing preferences on various distribution platforms, for example, mobile phones, with Time-Warner's

¹⁹ For a similar discussion of how the merger between General Motors and its main supplier of auto bodies contributed to improved efficiency by addressing post-contractual opportunism in the most efficient manner possible, see Klein (1988).

expertise in creating programming content. In June 2018, a federal judge ruled against the US government and in favour of AT&T.

Resale price maintenance and advertising

The Competition Act in Canada and US antitrust legislation identify a number of business practices as potentially anti-competitive, and the relevant government agencies have periodically taken actions to compel businesses to cease and desist from those practices. An example is where manufacturers require that retailers charge a minimum resale price for the manufacturers' products. For example, manufacturers of expensive watches, such as Rolex, often request stores selling their watches to set their prices at or above a specific minimum price. This practice is clearly a strategy to limit price competition in the retail market for, say, Rolex watches, which, in theory, should be bad for consumers. Another example is territorial restrictions whereby a manufacturer gives an exclusive right to a specific retailer to sell the manufacturer's product in a particular location. By limiting competition among different retailers in the location, the manufacturer is seemingly limiting price competition for the product in question, which would also seem to hurt the consumer.

But these practices raise an obvious question: why do manufacturers sometimes find it in their interest to limit competition in the “downstream” or retail segment of their industries? It doesn't make sense on its face for manufacturers to want retailers of their product to compete less. After all, if the manufacturer of a fancy watch wanted to straightforwardly exploit its market power, it could charge the retailer an above-competitive wholesale price and exploit its privileged position directly in the price it charged to its immediate customers, i.e., the retail stores that sold its watches.

The first economist to explain this paradox was Lester Telser of the University of Chicago in his 1960 article “Why Should Manufacturers Want Fair Trade?” Members of the UCLA School expanded on Telser's insight. Telser and the UCLAers shed important light on the rationale for practices that seemingly limit competition at the retail level by again appealing to real-world conditions surrounding market exchanges.²⁰ Specifically, information costs play a prominent role in helping us understand business practices such

²⁰ See Klein and Leffler (2009) for a discussion of the business practices discussed in the remainder of this chapter.

as territorial restrictions. Consider, for example, why a company such as Caterpillar, that makes very expensive earth-moving machines, might assign exclusive rights to specific retailers to sell and service its machines in particular locations. A customer spending hundreds of thousands of dollars on a piece of equipment wants to be confident that the machine will work as advertised. Furthermore, he wants to be confident that if anything goes wrong with the machine, it will be serviced quickly and properly.

Now imagine that Caterpillar allows a large number of dealers to sell its earth moving machines. Indeed, imagine it will sell its machines at wholesale to any retailer willing to pay the wholesale price. The task of vetting the retailers of Caterpillar's machines will then fall to the potential customers. While word-of-mouth and other sources of information can help inform potential customers about which Caterpillar dealers are more or less reliable, individual retailers have an incentive to free ride on the efforts of other sellers of Caterpillar machines to provide needed services. Such efforts include holding inventories of replacement parts to facilitate quick and lasting repairs. Those dealers who save money by free riding can afford to charge somewhat lower prices than dealers who provide the full set of services that are complementary to the sale of a very expensive piece of equipment. The incentive to free ride exacerbates the problem facing customers who want to do business with a "high-quality" dealer and are willing to pay for the high quality they receive. Specifically, potential customers must determine whether and to what extent a lower price charged by one dealer relative to another reflects a more efficient operation of the former dealership rather than lower quality after-sales service. The costs of gathering and evaluating information about the quality of different dealerships are likely to discourage some, perhaps many, potential customers from buying an expensive Caterpillar machine and cause them to buy a cheaper alternative.

Conversely, if Caterpillar assigned a single retailer in, say, the province of Alberta, the exclusive right to sell and service Caterpillar products, the free-rider problem would be significantly mitigated. The retailer holding the exclusive franchise in Alberta would have an incentive to sell Caterpillars while providing the full range of services that customers desire and are willing to pay for. This is because the retailer holds a very valuable property right granted it by Caterpillar; if that retailer cut corners in providing the services customers thought they had paid for, Caterpillar could revoke the retailer's right to sell

and service Caterpillars. At the same time, potential consumers would recognize that the exclusive retailer's incentive is to provide the level and quality of service that are commensurate with the price paid for Caterpillar machines. In this case, the exclusive territorial arrangement provides valuable information to customers about the quality of service they can expect if they buy Caterpillars. Customers who want higher quality machines will be better off under the exclusive territorial arrangement than they would be if Caterpillar sold its machines at wholesale to any would-be dealer of its products. When customers are better off, their satisfaction leads to higher retail demand and, therefore, feeds back to higher demand for Caterpillar products.

Some economists and many consumer advocates criticize advertising, arguing that much of it is wasteful. The pharmaceutical industry in particular has received substantial criticism for "wasting" money on advertising and then charging higher prices for their drug products to recoup their advertising costs.²¹

A stream of studies in the 1960s and 1970s focused on whether advertising was designed primarily to "inform" potential buyers about products' objective features and advantages or it was primarily aimed at making emotional appeals to consumers' vanities and aspirations.²² The underlying premise was that if advertising were primarily lifestyle oriented rather than informative, that would support the criticisms of advertising. That is, advertising that did not provide factual information about a product was unlikely to inform consumers about the product's features, price, and other attributes and would therefore, even if profitable, be socially wasteful.

The UCLA School made an important contribution to the debate surrounding advertising by highlighting the role that advertising plays in assuring consumers about the quality of products when it is costly to obtain information about the quality and reliability of products. Indeed, Klein and Leffler (2009) argue that the debate about whether advertising is primarily informative or aspirational is, at best, beside the point. In their view, the primary role of advertising is to build a product's brand name. In this regard, advertising can be seen as a stream of sunk cost investments that will pay off for a company *only* if that company stays in business long enough and can charge a

²¹ A review and critical evaluation of this argument is provided in Philipson (2016).

²² See Santilli (1983) for an overview of the debate about the nature of advertising.

sufficiently high price to recapture those investments. To stay in business for a long time, the company needs to deliver products whose quality is commensurate with the prices charged. A company seeking to cut corners and cheat on quality runs the risk of severely damaging its brand name. That would mean that it may not recapture the outlays it has made on advertising and promotion over the years. In short, firms selling more heavily advertised and often higher priced products use advertising to signal to consumers that they will provide reliable products and engage in honest dealing lest they depreciate the brand names they have spent so much money developing.

Conclusion

The contributions of the UCLA School to a better understanding and application of competition policy are consistent with its other contributions to our understanding of the economic world. Economic transactions take place in a world of uncertainty, imperfect information, and transaction costs. Buyers and sellers have strong incentives to structure transactions to address those issues. Critical evaluations of how transactions are structured need to take account of the motives for, and consequences of, the relevant initiatives taken.

This does not mean that the School minimizes the role of monopoly. On the contrary, members of the School were among the leaders in pointing to government, with its coercive power, as the main source of monopoly. Demsetz pointed out that for a monopoly to be sustained, the industry must be able “to restrict or retard the expansion and utilization of productive capacity.” This is much easier to do, he noted, when the industry can recruit the government to coerce potential entrants. He pointed out that the Department of Agriculture uses taxpayer funds to police restrictions on various crops, causing food prices to be higher than otherwise, something that could not happen in a competitive unregulated farm sector. He also pointed to the now-defunct Civil Aeronautics Board, which enforced a cartel among domestic airlines. He wrote, “An investment by industry to obtain government aid to monopolize is likely to yield much more control than the investment of the same sum without the aid” of government (Demsetz, 1989: 108).

It is perhaps most fitting to let Demsetz have the final word. He asserted in his 1973 article that any attempt to fine-tune business behaviour (other than prohibiting collusive agreements to fix price) is likely to do more harm than good to consumers. He argued that long-lasting characteristics of

the unregulated business world almost certainly reflect underlying efficiencies, and that industries that have been highly concentrated for years without government protection have done so only because producers in those industries serve consumers better than any seemingly feasible alternative industrial structure. If that had not been so, competition would have given rise to an alternative structure. The only important source of long-lasting monopoly, he concluded, is government.