

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE**

DAF/COMP/WD(2015)13
Unclassified

HEARING ON OLIGOPOLY MARKETS

-- Note by Louis Kaplow --

16-18 June 2015

This paper by Louis Kaplow (Professor of Law and Economics, Harvard University) was submitted as background material for Item 5 of the 123rd meeting of the OECD Competition Committee on 16-18 June 2015.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

More documents related to this discussion can be found at www.oecd.org/daf/competition/oligopoly-markets.htm.

JT03377353

Complete document available on OLIS in its original format

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

COMPETITION AGENCIES AND PRICE FIXING

*Note by Louis Kaplow**

1. The rule against price fixing is the least controversial prohibition in competition law throughout the world. There is, however, far less consensus than meets the eye on what constitutes price fixing and on how legal regimes should identify and remedy it. Moreover, prevailing views and existing doctrine are not grounded in systematic economic analysis of the problem. Instead, acting in a surprisingly formalistic manner, commentators—and, to a degree, government agencies and courts—have tended to focus on penalizing certain sorts of interfirm communications that facilitate coordinated oligopolistic price elevation rather than on whether such price increases have occurred.¹ My research systematically compares this conventionally favored version of the prohibition to a more direct approach aimed at socially harmful coordinated price elevation that can be detected and sanctioned effectively.

2. A priori, one would expect a direct approach to a problem to be superior to an indirect, circumscribed one. Analysts, enforcers, and adjudicators usually do best by asking the right question—the one of direct social concern—rather than by attempting to answer a substantially different one. Sometimes indirect approaches turn out to be superior, but this can be ascertained only after sustained analysis that articulates the competing methods and explicitly assesses their differences. It is therefore striking that many of the topics investigated here have received limited prior attention.

3. Before outlining the overall analysis, it will be helpful to fix attention on a fairly specific set of cases, which is where much of the dispute really lies, although this simple point has been largely obscured in academic commentary and legal decisions. At one extreme, purely competitive pricing behavior is clearly legal under the approach I will develop and under those subject to criticism. Likewise, at the other extreme—when there is unambiguous, smoking-gun evidence of price fixing—there is also unanimity, in this case, for liability.

4. Dispute arises in intermediate cases. Specifically, it concerns intermediate cases in which the following two conditions hold: (1) There is strong evidence of coordinated oligopolistic price elevation. (2) There is no direct evidence of secret hotel room communications and the like.

5. For these intermediate cases, three legal regimes might be considered. First, one might hold that there can never be liability: in the absence of smoking-gun evidence, defendants always win.² Second, one might assign liability if and only if the evidence that indeed defendants coordinated to elevate prices is sufficiently strong. This is the direct approach. Third, one might find liability if and

¹ For an assessment of attempts to make sense of the law's concept of horizontal agreement from a number of perspectives, see Kaplow (2011a) and Kaplow (2013, part I).

² This regime is not a focus here and has not been in prior work. Rather, it is generally agreed that cases based on circumstantial evidence are permissible, and indeed it is often noted that it is particularly important to allow such cases because of firms' incentives to keep their conspiracies secret. Nevertheless, in my writing I consider this possibility and find that, unlike the conventional, communications-based prohibition, this alternative has merit to the extent that the risk of false positives is particularly high and the amount of successful coordinated price elevation that would slip through would be modest.

only if one can infer from the circumstantial evidence that the acknowledged anticompetitive behavior arose specifically as a consequence of communications of particular types—keeping in mind that the communications to be inferred were not observed or evidenced by direct proof. This is what I refer to as the communications-based prohibition that is most commonly advocated, though not always described in this manner.

6. Having stated the question in concrete terms, let us now proceed to consider the analytical framework that enables one to assess how liability should best be determined. Under what I refer to as the direct approach, one begins with an examination of the social problem. From the outset, it is notable that none of the pertinent economic theory directly distinguishes between successful oligopolistic price elevation due merely to recognized interdependence (firms refrain from price cutting because of an expectation of retaliation derived from a shared appreciation of their circumstances) and that resulting from classic cartel behavior (firms meet secretly in hotel rooms to discuss prices and the consequences of cheating), or various cases in between. The harm from price coordination depends on the extent and duration of supracompetitive pricing, not on the particular means of reaching or maintaining an understanding to charge the heightened price.

7. An economic approach to addressing coordinated oligopolistic price elevation through legal liability—like the economic approach to law enforcement more generally—seeks to determine liability and apply sanctions based primarily on the deterrence benefits that result as well as any chilling of desirable behavior that may ensue, while also considering the costs of operating the regime. A central part of my work explores the problem of detection, the greatest challenge in the regulation of interdependent oligopoly pricing. Firms naturally seek to hide illegal aspects of their behavior, and reliable indicators are not always readily obtainable at low cost to enforcers. One set of detection techniques involves the use of market-based evidence to infer successful oligopolistic coordination, such as looking for sharp price drops associated with price wars. Others rely on internal evidence, which may pertain to firms' own estimates of costs and demand conditions as well as their understanding of their strategic situation vis-à-vis their competitors. Interfirm communications, when evidence thereof is available, also provide useful, perhaps decisive, information on whether successful coordination has occurred.³

8. The degree to which conditions are conducive to coordinated oligopoly pricing is also quite relevant. Highly conducive conditions make inferences of successful interdependent pricing more credible—but hardly certain, among other reasons due to the possibility of effective deterrence—whereas unconducive conditions cast significant doubt on its plausibility. As will be explored below, this feature of sound detection strategy differs importantly from what many associate with a focus on the existence of particular interfirm communications because, under certain assumptions, more conducive conditions reduce the likelihood that such communications occurred even though they increase the magnitude of the net expected social harm from a failure to apply sanctions.

9. In the course of my extensive investigation of the considerations bearing on the nature of the social problem, how it might best be detected, and how it should best be sanctioned, the commonly

³ Proof from internal documents is often misunderstood. Suppose, as has happened in some cases, that internal documents indicate that a firm refers to its competitors as “friends,” that it has an “understanding” with competitors, or that it “knows” that a particular price increase or cut will or will not be matched by rivals. Such is often taken to be smoking-gun evidence of explicit agreement. But a moment's reflection reveals that it is not. It is evidence that the firms are behaving interdependently and indeed have a subjective, mutual understanding about maintaining elevated prices. However, the standard view deems this to be *insufficient* for liability. Rather, as explained, it holds that it must be further demonstrated that the mutual understanding was reached through some particular, specified means of communications. The aforementioned internal evidence does not establish the means by which the firms obtained a meeting of the minds. That requires further inference. To summarize, such internal evidence is powerful proof favoring liability under the direct approach but not under the communications-based approach.

advocated approach—which most commentators also contend describes current law in leading jurisdictions—of attacking only express and perhaps also tacit agreements, variously defined, barely surfaces.⁴ That is, it does not emerge from a systematic consideration of how best to address coordinated oligopolistic price elevation. The core of my presentation at the meeting will highlight the final part of my research, which systematically compares the communications-based prohibition and the direct approach presented just above in order to ascertain whether anything important was overlooked and to identify explicitly the defects of the consensus method.

10. Initially, if a comparison is to be made, the conventional prohibition has to be defined. This turns out to be a difficult task.⁵ Most views can be captured by supposing that the price-fixing prohibition is limited to certain sorts of interfirm communication, whether designated by mode, content, or otherwise.⁶ This method on its face seems problematic because it focuses not on whether the means employed in fact caused harm in a given case but rather on whether one versus another means was employed to achieve a result that is not the focus of the dispute on “agreement.” Moreover, such a distinction suggests that detection will often prove difficult, as indeed is the case.

11. The essential contrast with the direct approach is that the communications-based prohibition uses a large portion of the most relevant evidence indicative of undesirable behavior in an indirect fashion and also counts evidence concerning conduciveness of conditions backwards, in what is referred to here as a paradox of proof. Specifically, under certain assumptions that many endorse, evidence of an unusually high danger of successful coordinated oligopoly pricing exonerates firms instead of raising the likelihood that they will be subject to sanctions.⁷ As a consequence, the communications-based prohibition tends to assign liability in cases involving both less social harm and greater chilling costs compared to those targeted by the direct approach. The direct method, with an appropriately calibrated burden of proof, can be shown to dominate the communications-based prohibition in that, for a common rate of application, the direct approach targets cases with both relatively larger deterrence benefits and relatively smaller chilling costs.

⁴ In Kaplow (2011a; 2013, part I), I examine in great depth many confusions associated with these terms. The term tacit agreement is particularly confusing. Some use it to mean an agreement that counts for liability, close to an express agreement, but perhaps lacking magic words or perhaps derived through interactions and communications that were less explicit in other respects. Numerous authoritative pronouncements declare tacit agreements to be illegal. On the other hand, some use tacit agreement to refer to mere parallel pricing that does not even involve any real coordination: that is, essentially competitive, independent behavior. Others use it to describe some middle category, but the contours of that category—the upper limit, where it becomes express rather than tacit, and the lower limit, where it becomes no agreement rather than a tacit agreement—are not defined consistently (or usually at all) by courts and commentators.

⁵ See Kaplow (2011a; 2013, part I) for an exhaustive analysis.

⁶ Some mistakenly imagine that a circumscribed prohibition might encompass all forms of communications that may contribute to successful coordinated price elevation. To see the problem, consider the familiar problem of two petrol stations on opposite corners that use their price signs to coordinate and maintain price increases. Virtually everyone views this not to be an “agreement” within the meaning of competition law, yet the price signs unambiguously are forms of communication. Indeed, they are rather precise forms. (Not also that all agree that if the two owners met at a bar and had a discussion that word for word tracked the content of what the price signs convey, an explicit agreement would be deemed to exist.) To take another familiar example, most agree that a sequence of press conferences in which competitors announce future pricing plans do not constitute an “agreement,” whereas they undoubtedly constitute communications. Yet another common confusion is the view that only secret communications can be illegal. Under this view, firms would be legally immune from liability for price fixing if they simply held their pricing discussions in public.

⁷ Under other assumptions, which also find support, this paradox is reduced or eliminated, but in a manner that undermines most of the basis for paying attention to the conventional method.

12. In my writing and briefly in my presentation, I will spell out this striking conclusion in greater detail. To get the flavor of the argument, suppose we have some degree of proof that coordinated oligopolistic price elevation in fact occurred. Now, holding that constant, imagine a range of cases that vary in the extent to which conditions are conducive to successful coordination, from very low to quite high. At the low end, it would tend to make sense to exonerate the defendants; in essence, the evidence that coordination would be extremely difficult or impossible will override the proof that coordinated price elevation probably occurred. Now, as conduciveness because easier and easier, the likelihood that there was indeed coordinated price elevation—and the likely magnitude and duration of that coordinated price elevation—is increasing. Hence, expected social harm is rising continuously as conduciveness increases. Moreover, chilling costs tend to be continuously falling because the likelihood of error if liability is assigned is falling (and, as my more extended analysis shows, the expected social cost conditional on error is also falling). Therefore, it is unambiguous that the optimal liability rule would assign liability in all cases above some level of conduciveness, but exonerate in cases below that threshold.

13. By contrast, the communications-based approach does something quite different, which is patently counterproductive. It too requires some level of conduciveness as a prerequisite for liability, for otherwise it is not plausible that coordination is happening at all. However, beyond that threshold, as conduciveness becomes higher and higher, at some point liability will no longer be assigned. Why not? Because when conduciveness is extremely high, it is generally accepted that firms would not have needed to engage in the sort of explicit communications that are illegal in order to achieve their desired outcome of successful coordinated price elevation.⁸

14. Finally, compare these two outcomes side by side. The core difference is that in cases in which conduciveness is greatest, the direct approach assigns liability and the communications-based prohibition exonerates. But these are the very cases in which social costs harm is the greatest and potential chilling costs are the lowest. This is entirely backwards from what makes sense as a matter of social welfare, variously defined.

15. These problems relating to detection and others arise because a communications-based prohibition requires that one not only determine the presence of interdependent oligopoly pricing—the focus of the direct approach elaborated above—but also identify the means by which it was accomplished. This supplemental requirement is particularly difficult to meet because firms attempt to keep their methods secret, because the difference between permitted and prohibited means of communication is formally rather than functionally determined, and because there is little empirical evidence that could guide the necessary inference process. As a result, the conventional approach is significantly more challenging to apply, which is ironic in light of its widely being favored on administrability grounds.

16. After presenting the core analysis on all relevant fronts, my research relates my findings to the leading three arguments offered in favor of the traditional view. One argument asserts a difficulty in attacking purely interdependent behavior because such would involve commanding firms to behave irrationally. This criticism is mistaken because it omits consideration of deterrence: applying heavy sanctions to certain choices will change what firms find it rational to do. Indeed, this surprisingly common argument would suggest that fraud, pollution, and all manner of socially harmful activity should not be penalized because we would be asking firms to behave irrationally. Simply put, what is profit-maximizing depends on the enforcement regime, and the purpose of competition law—like many other laws—is to change firms' incentives so that they no longer find socially harmful activity to be profitable.

17. Another objection is that making price elevation by oligopolists illegal is inconsistent with the legality of price elevation by monopolists. This point ignores the purpose of separate, more

⁸ My work considers various nuances and qualifications to this commonly accepted view, none of which support the communications-based prohibition.

stringent prohibitions on group behavior. Indeed, this is a central feature of competition law throughout the world. Moreover, this argument is also quite strange, for it implies that classic cartels should be legal.

18. Third, it is argued that remedies, particularly injunctive relief, directed at price elevation are problematic because they amount to price regulation. This claim is misconceived because, as I elaborate elsewhere in my work, effective control is best accomplished through penalties that achieve deterrence rather than by relying on directive legal commands. However, this argument is suggestive of an important concern with competition policy regarding price fixing that is underdeveloped in the existing literature, namely, that the detection of violations can be quite difficult, raising the problem of false positives, the prospect of which chills desirable behavior. As emphasized throughout the core part of my work, this concern should indeed be central in devising price-fixing rules, but the analysis here shows that it does not imply the desirability of the conventional approach over a direct method that takes explicit account of possible chilling costs. Indeed, as we have seen, the direct approach results not only in greater social benefit through deterrence but also lower chilling costs.

19. In closing, I wish to emphasize two respects in which the present analysis is incomplete. First, the focus throughout is not on the question that has preoccupied much prior discussion, “How should we define the term ‘agreement’?”⁹ but instead on the question, “What approach toward coordinated oligopoly pricing best promotes social welfare?” In answering the latter, it is natural to proceed by examining the nature of the problem and then determining how to identify its presence and to remedy it. Modern competition law emphasizes economic substance over form, has an open-ended, flexible formulation, and could in principle be amended. Also, under the laws of many jurisdictions, including the United States and European Union, a more substantive approach arguably conforms better to the statutory language, much of the relevant precedent, and aspects of existing practice than does the more formalistic approach that is widely endorsed.¹⁰ Even if prevailing doctrine imposes significant constraints, it is best to start by trying to determine what, in principle, is the most sensible way to address coordinated oligopolistic price elevation.

20. Second, optimal policy depends greatly on empirical evidence in realms where existing knowledge is incomplete. One set of issues concerns the extent of oligopolistic price elevation that would prevail under various regimes. Another involves the manner in which such coordinated pricing is achieved—for example, with resort to what sorts of communication—and, more broadly, how much of it can be detected, by which methods, and at what error cost. Without further knowledge, it is difficult to identify an optimal regime with confidence. However, the present framework not only guides that decision in the interim but also sharpens the research agenda so that better strategies might be devised in the future.

References

Louis Kaplow, “On the Meaning of Horizontal Agreements in Competition Law,” *California Law Review*, vol. 99(3), 683–818 (2011a).

Louis Kaplow, “An Economic Approach to Price Fixing,” *Antitrust Law Journal*, vol. 77(2), 343–449 (2011b).

Louis Kaplow, “Direct versus Communications-Based Prohibitions on Price Fixing,” *Journal of Legal Analysis*, vol. 3(2), 449–538 (2011c).

Louis Kaplow, *Competition Policy and Price Fixing*, Princeton University Press: Princeton, NJ (2013).

⁹ Although, as mentioned, a huge portion of my project addresses this question and shows existing understandings to be misconceived.

¹⁰ See Kaplow (2011a; 2013, part I).