XIII CONFERENZA

STATO O MERCATO?
Intervento pubblico e architettura dei mercati
Pavia, Università, 5 - 6 ottobre 2001

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SOME OPEN ISSUES IN THE ECONOMICS OF COMPETITION LAW: THE CASE OF OLIGOPOLY

pubblicazione internet realizzata con contributo della COMPAGNIA di San Paolo

Società italiana di economia pubblica

Dipartimento di economia pubblica e territoriale – Università di Pavia

Some Open Issues in the Economics of Competition Law: the Case of Oligopoly[(*)]

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preliminary version –
not to be quoted

> More: "The maxim of the law is: 'Silence gives consent'. If therefore you wish to construe what my silence 'betokened', you must construe that I consented, not that I denied".
>
> Cromwell: "Is that what the world in fact construes from it? Do you pretend that is what you wish the world to construe from it?"
>
> More: "The world must construe according to its wits. This Court must construe according to the law."
>
> Cromwell: "I put it to the Court that the prisoner is perverting the law - making smoky what should be a clear light to discover to the Court his own wrongdoing!"
>
> More: "The law is not a 'light' for you or any man to see by; the law is not an instrument of any kind. The law is a causeway upon which so long as he keeps to it a citizen may walk safely."
>
> (Robert Bolt, *A man for all seasons*)

1. *Introduction*

Antitrust is the field of intellectual challenge in social sciences. It demands constant co-operation among economists and lawyers in the design of the appropriate institutional framework of market economies.

Market economies are social contexts in which the relevant decisions are decentralised. Decentralisation, however, does not imply anarchism, as it would annihilate the benefits of decentralisation, to let the "freedom to choose" extend to the entire set of the actions that any agent can *by nature* perform. Indeed, any social body is identified by the general condition that each agent in it implicitly or explicitly accepts a conventional restriction of its

[(*)] I am grateful to Marzia Balzano, Rosella Creatini and Daniela Giangiulio for helpful conversation. A long lasting debt I owe to Michele Polo and Lorenzo Sacconi.

decision set, and is aware that similar restrictions consistently hold for the decisions sets of every other social agent. The specific array of the allowed (i.e., the socially restricted) decision sets for every social agent shapes the institutional framework of any particular society.

My topic today is one typical element of the institutional framework of market societies, namely competition law. By the "Economics of Competition Law" I refer to the contribution of economic analysis in the institutional design of the allowed decision set of economic agents with respect to their market interaction.

In the classical perspective of *purely* competitive markets, the typical institutional setting is identified in a system of property rights, a contract law, and a judicial system to enforce both. I emphasise that such institutions are all intended to support the social relationship of "exchange", whereas, under *pure* competition, market interaction requires no further restriction in the decision sets of economic agents. *Pure* competition is indeed built on the so-called "price-taking behaviour hypothesis", according to which, by freely picking from within its own decision set, any economic agent, be it a consumer or a firm, only affects its own welfare, but has no power to affect the welfare of any other social agent. The price-taking behaviour hypothesis converts economic markets into what I would label, after the name of the author of a most influential essay "On Liberty", a "Millian" context. It was John Stuart Mill's (1982) tenet that no ethical justification may be invoked for excluding from a social agent's allowed decision set any action that has no effect on any other social agent's welfare.

Pure competition only being an ideal benchmark, competition law is concerned with the imperfections of actual competition and the inefficient results associated with them. In contrast with the institutions designed to enforce the exchange - that are both exogenous to market interaction and a pre-requisite for it - the institutions of competition law crucially depend on a number of conditions that influence the market outcome. The general presumption is that, in several real market circumstances, a specific restriction of the firms' strategy sets - beyond the one in support of the catallactic order - is needed for the outcome of firms' interaction not to be highly inconsistent with the optimal social division of labour. Thus, competition law is a typical instance of "market architecture", i.e., of the institutional design of market economies intended to create or enhance compatibility between private and collective aims in economic interaction. It may be worth stressing that the ideal benchmark of *pure* competition significantly affects the actual design of competition law, a point which, as I will try to make clear, may be in need of some critical reassessment.

In this paper I will confine myself to oligopolies and to the way in which competition law specifically restricts the strategy set of oligopolistic firms. Social concern with oligopolies arises out of the adverse welfare properties associated with collusive behaviour, i.e., with firms maximising collective industry profits at the expense of society's overall surplus. This *outcome* perspective fits in well with economic analysis. In recent decades, the conditions under which oligopolists succeed in solving the "oligopoly problem", i.e., the not trivial problem of co-ordinating behaviour to attain a collusive solution, have been investigated in detail. In particural, modern oligopoly theory has focused on the conditions that make co-ordination possible in that they guarantee *internal* enforcement to collusive behaviour.

In the legal perspective, competition law knows of just one *conduct* against which collusive behaviour can be *legally* assessed: co-ordination by means of agreements, both in the form of formal covenants and informal, so-called, concerted practices. Accordingly, competition law prevents collusion (and its adverse welfare properties) by excluding from the allowed decision set of oligopolistic firms "all agreements between undertakings, decisions by associations of undertakings and concerted practices .... which have as their object or effect the prevention, restriction or distortion of competition ...."[1].

A serious tension between "conduct" and "outcome" arises out of such different, economic and legal, perspectives. On the one hand, the focus on internal enforcement in economic theory makes the distinction between agreements and other forms of social conduct resulting in the collusive outcome irrelevant. Moreover, since any collusive solution has to be obtained as a self-enforced (Nash) equilibrium of the appropriate (indefinitely repeated) game, the legal approach cannot help facing the conclusion that, in the light of the co-ordination required to attain it, collusion hardly is distinguishable from any other (Nash) equilibrium solution of the same game (independently of their respective welfare properties). On the other hand, economic analysis so far has almost neglected to investigate in detail how and under what conditions oligopolies as social bodies (in fact, a subsociety within the entire economy) resort to organisational - or even institutional - arrangements to successfully co-ordinate their members' behaviour.

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[1] The quotation reproduces part of art. 85 (now art. 81) of the Treaty of Rome, that established the European Community. Same focus on agreements underlies the U.S. Antitrust law.

My aim in this paper is to evaluate whether, in a number of relevant circumstances, the tension between conduct (i.e., the legal perspective) and outcome (i.e., the economic perspective) can be relaxed, by shifting the focus of competition law from straightforward co-ordination on market strategies (such as prices, quantities, market shares and so on) to the firms' concerted efforts to design and implement organisational arrangements of the oligopoly with the intent to ease collusive behaviour. This calls into play the notion of *facilitating practices*.

In the legal tradition on competition, mainly in the U.S., a "facilitating practice" is normally viewed as the content of a "collateral", or "ancillary", agreement, which can only be challenged in conjunction with the *main*, directly collusive, agreement. Sometimes, the facilitating practice can be used as *circumstantial evidence* of the main agreement. By referring to two recent decisions of the Italian Antitrust Authority, I will investigate in this paper whether and how organisational design of oligopolies, with the purpose of implementing a facilitating practice, can, as such, be directly challenged under competition law. The Italian Antitrust Authority has recently condemned two agreements on facilitating practices (respectively, a sophisticated scheme of resale price maintenance[2] and an information sharing agreement[3]) for having an anticompetitive object. It is worth reminding that a decade ago the European Commission[4] had already been involved in a similar case concerning an information sharing agreement[5].

A significantly high degree of fuzziness in the legal rule is a crucially related shortcoming of the tension between "outcome" and "conduct" in competition law. By shifting the focus from evasive and pervasive co-ordination to well-structured organisational - or, even, institutional - design in oligopoly, instances of illegal collusive behaviour can be more carefully typified. This would consistently integrate both competition law and current economic analysis, thus providing a more precise definition of the firms' allowed decision set in oligopoly.

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[2] See Autorità garante della concorrenza e del mercato, *Accordi per la fornitura dei carburanti*, provv. n.8353, 8 giugno 2000.

[3] See Autorità garante della concorrenza e del mercato, *RC Auto*, provv. n.8546, 28 luglio 2000.

[4] See European Commission, *UK Agricultural Tractor Registration Exchange*, 1992.

[5] Building on the European jurisprudence on information sharing, in a recent paper, KÜhn (2001) argues that "collusion should primarily be fought indirectly by targeting types of communication between firms that are particularly likely to facilitate collusion". The present paper is in the same spirit of KÜhn's, at least as far as the general motivations and the specific competitive assessment of information sharing agreements are concerned.

Institutional design in oligopolies may, in many circumstances, also result in public institutions contributing to co-ordinating collusive behaviour. This is an old-debated theme in the legal tradition. A sharp devide is imposed between firms' *private* behaviour - to which alone competition law applies - and firms' behaviour induced by statutory norms or regulation. However, it may still be an unsettled question, where the divide exactly lies. This is really unfortunate, for two concurring reasons. First, serious welfare losses arise from public institutional protection of collusive behaviour, that should be clearly prevented whenever it is possible. Second, the boundaries between allowed and prohibited decisions appear to be particularly blurred to firms, who see themselves ensnared in between a conflict among different public authorities. Economic analysis has mostly been absent from such debate. Yet, to my view, it has a significant contribution to give, in particular by integrating analytical results of oligopoly theory within a public choice perspective.

The paper is organised as follows. Section 2 emphasises the conceptual distinction between regulation policy and competition law. Section 3 critically confronts current economic and legal theories of oligopoly. Section 4 briefly revises the notion of facilitating practice in the light of a possible integration between the legal ("conduct") and economic ("outcome") perspectives on oligopolistic collusion. Section 5 discusses two recent decisions of the Italian Antitrust Authority. Section 6 raises the question of the need to integrate the legal approach to oligopolies with public choice analysis.

2. *Competition law and regulation.*

The distinction between competition law and a different institution equally concerned with inefficiency in market results, namely regulation, is a crucial one in the legal perspective[6]. Yet, may be due to the common objective, it is often blurred in the economic debate, and the same theoretical approach is sometimes applied to both.

This is highly unfortunate. Industry regulation essentially consists in turning a class of - otherwise - private economic decisions into collective decisions, with the aim of directly attaining, in given circumstances, a calculated efficient - though usually second-best - solution. Such collective decisions are taken within the articulated structure of delegation according to

[6] A comparative assessment of competition law and regulation was the subject of the Conference "Regolazione e concorrenza" that the Italian Antitrust Authority organised in Rome in 1999. For the proceedings of the Conference, see Tesauro and D'Alberti (Eds., 2000).

which the society's political institutions are framed. Moreover, in the regulator's perspective, the specific circumstances are all that matters. It is the calculus of costs and benefits in the given circumstances that leads the regulator - which has also often to trade off a multiplicity of diverging objectives - to select the desired solution. This gives an irreducible scope for discretion to the regulator's judgement, thus making industry regulation a proper "policy". In order to induce the appropriate specific solution, the regulator consistently has the coercive power to restrict the regulated firm's strategy set according to the circumstances. No rȍle is normally envisaged for the regulated firm's freedom of choice, apart from the one instrumentally required to overcome the asymmetrical information between the regulator and the regulated firm (with the regulatory powers used with the purpose of eliciting the private information).

In contrast, it is not the purpose of competition law to artificially reproduce a calculated efficient solution in specific circumstances. Competition law only sets the scope for the decisions that firms can freely take in their market operations. This is done by setting general rules (that define the firms' allowed decision sets) deemed to be adequate to deal with general cases (that is with the entire set of similar or analogous instances). Contrary to regulation policy - whereby a collective decision substitutes for the result of decentralised market decisions - the restriction in the firms' decision sets usually imposed by competition law is intended to enhance the working of competition and to fully exploit the benefits that can be expected from market decentralisation.

As a crucial consequence, the *implementation* of competition law is not a matter of "policy", rather of the distinction between "lawful" and "unlawful" acts. When specific behaviour in specific circumstances is to be assessed according to the (competition) law, the assessment only concerns whether the behaviour does or does not belong to the firm's allowed decision set and should, in principle, be irrespective of its specific consequences. In other words, we should not let the "lawfulness" of a given conduct crucially depend, as a rule, upon the particular effects of that conduct in specific circumstances. This is a basic legal principle that consistently holds also for competition law.

Let me be sharp on the point. I am not arguing that outcomes are irrelevant in the *design* of competition law. This is, on the contrary, what exactly the economic profession should contribute to: namely, to show whether the *abstract* conduct followed by the firms in any particular case only can reasonably be explained by the *general* purpose of achieving anticompetitive results. In contrast, in the *implementation* of competition law any firm should as a rule be put in the position to evaluate the boundaries between lawfulness and unlawfulness of a given conduct, disregarding the evaluation of the effects of such conduct. Indeed, the relevant effects of market behaviour are normally collective effects that only a sophisticated collective analysis can tell. A firm's private decision could not and should not bear the burden of being a substitute for a collective decision. At the same time, the multiplicity of possible motivations, lying at the origin of a firm's conduct, ought not matter in the implementation of competition law, apart from the crucial case in which the motivation itself consists in consciously pursuing a forbidden conduct.

The tension between the legal view and the regulatory view in the *implementation* of competition law has since long been the object of a much livelier debate within the legal than within the economic profession. It underlies the distinction between *per se rules* and *rules of reasons* in the U.S. antitrust law. In the evaluation of agreements prohibited according to art.85 (now 81) of the Treaty of Rome, it involves the careful analysis of the competitive *object* or *effect*. In a slightly different perspective, the same tension is partly a cause, and partly a result, of the high degree of fuzziness of the legal rule in the field of competition law. As far as agreements are concerned, the lawyers' effort to precisely typify at least a class of instances of illegal collusive behaviour, in order to subject them to *per se rules* (in the U.S.) or condemn them for their anticompetitive object (in Europe), is clearly intended to arrive at a more precise definition of the firms' allowed decision set in oligopoly. To our regret, there has in fact been little economics in this effort. Moreover, a vast territory still remains unexplored. It is my contention that, far from being only the lawyers' land, *per se rules*, as well as the analysis of the anticompetitive object of concerted behaviour, should be the very realm of the economics of competition law[7].

[7] Although my focus in this paper is on agreements, a brief comment may be in order on how the tension between conduct and outcome also pervades the other field of competition law, namely market monopolisation. Properly speaking, market monopolisation is unlawful only according to American antitrust law. The situation is partly different in the European perspective, where according to art.86 (now art. 82) of the Treaty of Rome it is forbidden for a firm enjoying a dominant position in a market to *abuse* of it. The general legal theory of the abuse of dominant position is that a firm enjoying a dominant position in a market has a *special duty* to refrain from conduct or behaviour that would otherwise - i.e., in absence of market dominance - belong to the firm's allowed strategy set. The conceptual framework is thus consistent with the one discussed in the text. Moreover, in the E.C. Competition Law, a number of instances of abusive behaviour have been typifyed. The process through which a firm acquires or strengthens its dominant position in the market, that falls under the heading of market monopolisation in the U.S. Antitrust Law, is only taken into account, by the European competition law, when it involves external growth of the firm, through a merger (or an acquisition). The boundaries between competition law and regulation are more fuzzy for

3. *Economic and legal theories of oligopoly*

In contrast with the otherwise irregular vagaries (or regular up-and-downs) of scholars' and judges' attitude as to what is to be understood as lawful or unlawful firms' conduct in the market, unlawfulness of agreements has always been uncontroversial in Competition Law, both along its historical evolution and across different theoretical approaches. Yet, in the current evaluation of oligopolistic behaviour, a tension between conduct (in the legal perspective) and outcome (in the economic perspective) has grown very high.

Economic analysis is primarily concerned with the adverse welfare properties of collusive market solutions. In this perspective, it looks at the conditions under which oligopolists succeed in solving the "oligopoly problem", i.e. at the conditions which, by guaranteeing internal enforcement to collusive behaviour, allow co-ordination on a collusive market solution to be successful. The law knows of just one conduct against which oligopolists co-ordinating behaviour can be legally assessed: agreements, both in the form of formal covenants and informal concerted practices.

To be sure conspiracy[8], among oligopolistic firms to jointly fix a monopoly price or a vector of monopoly quantities or to share markets, is excellent evidence that the oligopolists have succeeded in reaching collusive co-ordination. However, conspiracy as such is difficult to detect. To overcome the difficulties of getting evidence of explicit collusive agreements, Competition Law has worked out the more subtle notion of "concerted practice". This was defined, by the European Court of Justice, in the *Dyestuffs* case[9], as "....a form of co-ordination between undertakings which, without having been taken to the stage where an agreement properly so called has been concluded, knowingly substitutes practical co-operation between them for the

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merger evaluation, both in the U.S. and in the E.C. The point is that, when deciding whether to prohibit or allow a merger, the Antitrust Authority always performs a perspective analysis. It has to find out whether and to what extent it is a plausible conjecture that the firm's decision set and/or the mapping from the firm's decision set to the set of the consequences significantly changes after the merger. Thus, the analysis of a merger always involves regulatory - i.e. discretionary - powers because it deals with perspective outcomes, which means both because it is *perspective* and because it is concerned with *outcomes*, i.e. the *specific* outcomes of the *specific* merger. This latitude of discretion can never thoroughly be filled even by detailed codification of the criteria of assessment, as guidelines may help locate safe harbours, but do not offer certainty at sea.

[8] In the recent "*Lysine*" case, the FBI was able to produce the following. Four people, each one coming from a different continent, had covertly been filmed in a smoke-filled room and the following words could be heard: "Did I eventually convince you that I am your friend, your are my friend; your customer is my foe, my customer is your foe, our customers are our foe!".

[9] Cases 48-57/89 *ICI v. Commission* (1972).

risks of competition". However, when confronted with the task of specifying what kind of evidence would be needed to substantiate an allegation of "concerted practice", the European Court of Justice referred to "*reciprocal communications* between competitors with the aim of giving each other assurances as to their conduct on the market" and insisted on the need of "a firm, precise and consistent body of evidence of *prior concertation*[10].

Economists have since long been wondering whether the focus on communication among firms, with the purpose of giving each other a mutual assent to a common conduct on the market, offers the appropriate clue to oligopolists' collusive co-ordination. Economic analysis looks at the oligopoly as a social body (in fact, a sub society within the entire economy) endeavouring to design the appropriate incentives to solve the typical "public good" problem that is always involved whenever the behaviour of many individuals must be co-ordinated to pursue a collective aim. To this purpose, several organisational - or even institutional - arrangements may emerge, that economic analysis tries to consistently explain in terms of comparative efficiency, given the relevant set of "structural" conditions. The crucial question is, whether reciprocal communication of a common conduct on the market is a necessary, let alone a sufficient, element of the collusive behaviour.

History of oligopoly theories provides us with different, not necessarily alternative, theoretical explanations of oligopolists' co-ordination.

Classical economists sought the solution of the oligopoly problem in the design of mechanisms of external enforcement. The "conspiracy of ..... people of the same trade...." that, according to Adam Smith (1982), "seldom meet together" (p. 232) was purportedly intended to have their own interests furthered by political decisions in an institutional context where "corporation laws" and "regulations of police" were thought to be necessary tools to keep producers' co-ordination and the ensuing "enhancements of the market price" viable and stable (p. 165). The classical theory of oligopoly, according to which collusion among producers could only survive provided an institutional protection is granted, is thoroughly alien to the current legal theory of oligopoly and competition. In full contrast, the latter sets a clear dividing line between firms' *private* behaviour - to which alone competition law applies - and firms' behaviour protected, encouraged or merely facilitated by statutory norms or regulations, which is, in principle, immune from competition law.

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[10] Cases C-89/85 *A. Ahlstrom Oy and others v. Commission* (1993).

Modern Public Choice analysis can offer valuable insights on the conditions under which oligopolists reach collusive co-ordination with the help of mechanisms of external enforcement that find their proper place in the political arena. Let me however postpone the possible relations between competition law and public choice analysis to the final section and briefly turn to 19th century's theories of competition.

My view is that the source of the current tension in competition law between conduct and outcome must be located in the state of economic analysis of competition in those early days when the design of competition law first developed. It was the emphasis on the ideal benchmark of *pure* competition as price-taking behaviour that in fact provided legal scholars with a straightforward opportunity to logically turn an economic concept (the isolated, rational, decision maker) into a well-defined legal notion. The fundamental dividing line between competitive and collusive conduct was then found in the one between individual, independent conduct versus interdependent co-ordinated conduct[11]. By substituting a co-ordinated course of actions for autonomous, independent behaviour in a market, producers put themselves outside the realm of (pure) competition and intentionally get in the way of the working of competition. Moreover, as neoclassical analysis ignored the organisational, or even institutional, arrangements intended to solve the incentive problems that pervade social co-ordination, competition law straightforwardly focused on explicit communication as the basis for co-operation[12].

Building on models of strategic rationality, modern oligopoly theory enlightens and isolates the conditions that make a producers' "agreement" internally enforceable, thus focusing on the elements of the strategic

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[11] I find the analytical perspective from which Turner (1962) first tried to overcome the differences between the legal and the economic approach highly illuminating in this respect.

[12] To be sure, in a historical perspective, one might also be tempted to see the legal prohibition of agreements as a means to outlaw (external) enforcement of firms' co-operation, in that the prohibition withdrew the protection of contract law from a "contractual" solution of the oligopoly problem - as could have been made possible, for instance, under corporativistic arrangements. However, this approach is unsatisfactory in many respects. To start with, it can only apply to formal covenants, thus leaving informal concerted practices - which must be built on internal enforcement mechanisms - unexplained. Moreover, although unlawfulness of agreements in oligopoly obviously makes the external enforcement of contract law impossible, if one sees in the external enforcement of the contract law the rationale for oligopolists to *agree* and, then, the theoretical reason for crystallising the illegal oligopolistic behaviour in the notion of "agreement", then one should also reach the conclusion that all that would have been needed in order to prevent collusive behaviour should have been the *mere* withdrawal of the contract law protection from covenants, a circumstance which would have in fact left collusive agreements unenforceable, unobliging, valueless and then irrelevant. In other words, there would have been no need to condemn agreements as illegal behaviour and to penalise them. If firms do still agree, notwithstanding the removal of the contract law protection from their agreements, then the rationale for an agreement to be a tool of collusive behaviour cannot be sought in its external enforcement properties.

interdependence that give each firm the right incentives to undertake the collusive strategy. Such theory is part of a larger, fundamental, achievement for our theoretical understanding of how do mechanisms of social co-ordination on Pareto-efficient[13] equilibria work. For those interested in full integration of economic and legal theories of oligopoly, it is however also the source of a number of difficulties.

In modern oligopoly analysis, nothing compels us to distinguish between explicit agreements and the implicit anticipation of competing firms' strategies in the dynamic interaction. In fact, in the stylised representation of oligopolistic interaction makes explicit agreements unnecessary behaviour. The same is true of any sort of *milder* concertation, the "firm, precise and consistent" evidence of which is legally a requisite to prove allegiance of infringement of art.81 as "concerted practice". To be sure, economists concede that in the real world explicit agreements may help, especially when attaining a particular outcome involves a *pure* co-ordination problem. However, the theoretical obstacle remains unsurmounted, as, to that purpose, even unilateral communication - which, as such, remains outside the legal notion of concertation[14] - would suffice. In short, as Kühn and Vives (1995) put it "there is no satisfactory economic theory that would explain why communication would resolve co-ordination problems in a determinate way".

I see two flaws in the current state of economic and legal theories of oligopoly.

First, there is, in the economic theory, an overall, serious failure to understand and explain (reciprocal) communication in social interaction. Communication with the purpose of concerting actions - precisely the kind of behaviour properly pursued by competition law - concerns as a fact a large part of the life of a social body. It is at the heart of the working of most institutions and organisations explicitly built to co-ordinate social interaction with the purpose of maximising collective benefits. This also holds true for oligopolies, as a lot of factual behaviour remains ignored and unexplained in current oligopoly theory. Yet, to recognise that communication among firms has a proper rôle in collusion not only would not in any way contrast with the basic insight of modern oligopoly theory (the requisite that any collusive

[13] In the case of oligopoly, I refer to Pareto-efficiency with respect to the relevant subsociety of oligopolistic firms.
[14] It must however be recalled, that occasionally (see for instance *Interstate Circuit, Inc. v. United States,* 1939, 306 U.S. 208) the Supreme Court found that even unilateral communication may contribute to circumstantial evidence of collusion.

agreement be structured in such a way as to take full account of the firms' later incentive to cheat on it) but also would lay the basis for a richer theory of social co-ordination that would integrate communication and incentives[15]. Indeed, the basic question of how do firms *converge* in selecting a specific equilibrium out of a potentially infinite set of equilibrium solutions which an indefinitely repeated game admits of, still is with no answer. The standard approach that suggests to separate the bargaining problem on the frontier from the implementation problem of a given point that belongs to the frontier is unsatisfactory[16]. In particular, the inevitable incompleteness of any collusive agreement and the need for the firms to continuously - and endogenously - adapt it to changing circumstances is neglected. Moreover, apart from the case of duopoly, structured communication is needed among firms whenever cheating occurs - a circumstance which might not be observed in equilibrium, but of which the profile of equilibrium dynamic strategies has to take full account. In those circumstances there is a need for the rest of the industry to reach a common understanding in recognising that cheating has occurred and in selecting co-ordinated strategies to retaliate against the cheater. To this it may be added that communication helps retaliation to be more tailored and the implementation of *tit-for-tat* strategies more easy.

Second, I see a more abstract difficulty. Once the ideal benchmark of pure competition (that rules out any rationale for co-ordination among economic agents) is forsaken, some scope for co-ordination irreducibly creeps in due to the intrinsically strategic context. This straightforwardly flows from the universally accepted game-theoretical concept of Nash equilibrium solution as the plausible rational behaviour in social situations. Such universal acceptance relies on the Nash solution being the only state of the game which, when properly anticipated, is self fulfilling. The so-called literature about "rationalisability" shows that playing "Nash" presupposes that the players share a mutually consistent system of beliefs (the same overall view concerning the likelihood of various outcomes), in the sense that each player's beliefs can be derived as conditional distributions from a "common prior"[17]. Indeed, the concept of Nash equilibrium solution has a salience that may feed the common belief that the Nash equilibrium is normally realised. However, the salience of the Nash solution breaks down not only: (i) when prescribed actions are not unique; but also (ii) under uniqueness of the Nash equilibrium solution, as the concept of salience as such requires that it is universally

[15] A promising recent literature focuses on richer integration of communication and incentives, by taking inspiration from historical evidence of actual collusive behaviour and cartel organisation. See, in this respect, Genesove and Mullin (2001).
[16] A critical, detailed, exposition of this approach, in the perspective of competition law, is provided by Ghezzi and Polo (2001).
[17] This is the axion of "common priors", proposed by Bernheim (1986).

recognised[18]. Thus the concept of Nash equilibrium solution inherently presupposes the players' common awareness of the need for them to *co-ordinate* on a common behavioural rule. The kind of co-ordination required for the players' common understanding on a Nash equiibrium solution of the game is, by the same theory, referred to vague "psychological and cultural hypotheses"[19]. This has *prima facie* more to do with the social environment, which can be assumed to be exogenously given with respect to the specific interaction of specific players, than with the outcome of their interaction. However, *culture* itself only lives and evolves as the result of social interaction.

Notwithstanding such irreducible elements of co-ordination, today competition law, at least within the E.C., accepts behaviour according to the Nash equilibrium solution in oligopoly as compatible with competitive conditions and with the prohibition of agreements[20]. The point is that, the collusive outcome - that emerges as a self-enforced equilibrium in an indefinitely repeated game - is nothing but a possible Nash equilibrium of the appropriate game. Thus a collusive outcome arising in oligopoly because firms' behaviour simply follows the rationality prescriptions of a Nash equilibrium solution of the appropriate dynamic game is also accepted, in Europe, as immune from competition law. The European Court of Justice made this conclusion clear when stating that[21] "the criteria of co-ordination and co-operation ....must be understood in the light of the concept inherent in the previsions of the Treaty ..... that each economic operator must determine independently the policy which he intends to adopt .... it is correct to say that this requirement of independence does not deprive economic operators of the right to *adapt themselves intelligently* to the existing and *anticipated* conduct of their competitors....." (*italics* added).

Things are in a sense different in the U.S. competition law, where the concept of Nash equilibrium is not thoroughly accepted as identifying behaviour compatible with the prohibition of agreements[22]. In particular, in the U.S., a common test for detecting infringements of Sherman Act, par. 1, prescribes to ascertain "whether for each individual a particular act would be

[18] See Bernheim (1984), especially on the pages 1009-1010.
[19] See Bernheim (1986), p.481.
[20] See Phlips (1995).
[21] Cases 40-48/73, *Suiker Unie & others v. EC Commission* (1975).
[22] Hovenkamp (1994), chapter 4.

profit-maximising whether or not others did the same thing”[23], thus calling into play the mere definition of the Nash equilibrium solution.

We have eventually come to a twofold conclusion. On the one hand, according to current economic theory, in the light of the co-ordination that is required to attain it, a collusive outcome supported by Nash equilibrium strategies of the appropriate game hardly is distinguishable from any other Nash equilibrium of the same game - independently of their respective welfare properties. On the other hand an *irreducible* degree of co-ordination is implicit in any Nash equilibrium solution of the game.

Maybe for the latter reason, actual conduct in oligopoly, even outside collusion, is rich of elements that, according to the prevailing standards in competition law, might be included within the category of illegal behaviour. Even absent collusive purposes, people of the same trade regularly discuss common market issues, often by institutionally participating in trade associations, where they systematically share views on changing market conditions, and, most important, get reciprocally informed on each other’s behaviour. Let me also add the following in a whisper. Given the difficulty of proving collusion through formal covenants, the recourse to the notion of “concerted practices”, apart from reaffirming the need of evidence of reciprocal communication, in fact resulted in lower substantive requisites for illegal collusive behaviour. Much of everyday behaviour that takes oligopolists’ interdependence seriously can easily be interpreted as falling within the range of illegal competitive behaviour. I take this to be the result of our inadequate theoretical understanding of the scope and relevance of producers’ co-ordination in oligopoly.

There is, moreover, another source of possible misunderstanding. Whenever evidence of a formal agreement is lacking, economists usually understand their analytical contribution in the assessment of an antitrust case as consisting in providing the logical reasoning through which *indirect* proofs of collusion can be derived. To this purpose, they emphasise those circumstances (namely, small number of firms, high frequency of the interaction, growing demand, symmetry, multimarket contacts, and so on) that make collusion a Nash equilibrium solution of the indefinitely repeated game. However such contribution cannot overcome the conceptual gap, as it cannot wedge in the crucially legal distinction between “intelligent adaptation” (that

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[23] Hovenkamp (1994), p.168. Here, the influence of the benchmark of pure competition is thoroughly apparent.

is behaviour consistent with playing Nash equilibrium strategies) and "concertation".

4. *Facilitating practices*

Are economic and legal theories of oligopoly doomed to go on asunder? Is there a way out of this? In what follows, I will put forward a tentative suggestion to this question by referring to the analysis performed the Italian Competition Authority in two recent cases. It is worth stressing that the same approach also finds support in a decision of the European Court of Justice[24].

I start from the consideration that, in order to be challenged under competition law, co-operation among firms requires the detection of a behavioural attitude that is different from the one that merely guarantees strategic equilibrium co-ordination. Then, I propose to identify such different behavioural attitude in the firms' contribution to a number of typical "artifices" that characterise the organisation of actual oligopolies, under the condition that economic analysis supports the theoretical conclusion that such "artifices" can only be normally understood as social mechanisms intended to induce collusive behaviour. It is straightforward to relate this approach to the notion of "facilitating practices". Thus the relevant question becomes whether and under what conditions can facilitating practices be typified as instances of co-operative illegal behaviour in a manner that is consistent with both current competition law and economic analysis of oligopolies.

According to Hovenkamp (1994, p. 171) a "facilitating practices" is there whenever "Firms [....] agree among themselves, either explicitly or tacitly, to engage in certain practices that will make collusion easier". The legal tradition, mainly in the U.S., usually classifies facilitating practices as "circumstantial evidence" of an anticompetitive agreement. In other words, the Antitrust agency can only make use of the evidence on the facilitating practice (or even on an agreement the content of which is the facilitating practice) to detect the *main* agreement whereby the parties somehow reach a common understanding about prices or market segmentation. A corollary of this approach is that, when the facilitating practice is itself the content of an agreement, the latter can be challenged under competition law only as a "collateral" or "ancillary" agreement. In particular, this implies that, in the legal assessment of collusive behaviour in oligopoly, a facilitating practice can

[24] See European Commission, *UK Agricultural Tractor Registration Exchange*, 1992.

only be challenged, provided a detailed investigation has been brought forth to get rid of any other justification than the one of, precisely, facilitating the oligopolists' agreement.

In contrast with this approach, some recent decisions in the European Competition Law (with the relevant contribution of the Italian Competition Authority) have looked at facilitating practices as the *typical* collusive behaviour, in addition to direct conspiracy. To my view, this opens an important new path in the legal assessment of collusion, a task which must be performed in tight co-operation with economic analysis.

To identify facilitating practices as the core of collusive behaviour in the light of competition law is worthwhile for a number of reasons. To start with, facilitating practices are social "artifices", i.e., mechanisms that must be *artificially* designed to pursue a collective aim. This endows them with the typical attribute of competitively illegal behaviour an antitrust prosecutor has exactly to look for, as they necessarily require a common *understanding* among oligopolists[25]. Such an understanding can be reached either by way of a formal covenant or of a concerted practice. Since both ways can be scrutinised according to two well-developed legal concepts, facilitating practices can thoroughly be dealt with according to the legal theory of collusion.

Second, a facilitating practice properly identified is *objectively* conducive to collusive behaviour. In the lawyers language, to find that collusion is the *object* of a facilitating practice means that the practice as such can legally be challenged, quite independently of the array of alternative motivations or even of the firms' full awareness of its collusive potentiality.

Moreover, the content of the oligopolists' common understanding is fully consistent with modern oligopoly theory. Indeed, facilitating practices are such precisely because they change the firms' environment in such a way that every firm, when solving its own choice problem - even by means of an individual decision whereby it "adapts itself intelligently" to a Nash equilibrium - sees the appropriate incentives to choose a particular action that belongs to a profile of industry strategies associated with the highest level of joint profit.

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[25] I am assuming away the so-called "unilateral facilitators" (see Hovenkamp, 1994, p.173*ff*) which, in the European perspective, would entirely be catched in the dilemma between "equilibrium" and "concertation".

Last, but not least, a taxonomy of facilitating practices, provided their anticompetitive object is robustly founded in economic analysis, would greatly help to overcome the current high degree of fuzziness of the legal rule, thus endowing firms with a systematic and reliable identification of what is to be understood as unlawful competitive conduct.

Although such taxonomy has never been fully worked out in the current theory and practice of Competition Law, yet important contributions have been offered in the recent economic debate, also stimulated by some deserving innovative efforts in the implementation of the European Competition Law. To illustrate such efforts I will briefly dwell on two recent decisions of the Italian Competition Authority that concerned two facilitating practices. The former involved a concerted practice of information sharing in car insurance. In the latter a concerted practice of resale price maintenance by gasoline producers was detected. In both cases - although supplementing its investigation with systematic and plentiful evidence of the collusive effects that the challenged practices had produced in the industry equilibrium - the Italian Competition Authority explicitly condemned both practices because of their anticompetitive *object*, i.e., because of their mere potentiality to give rise to a collusive equilibrium. In other words, the unlawfulness of both facilitating practices followed independently of the firms' awareness (or unique purpose) of producing a collusive market equilibrium *and* independently of the actual ensuing of such anticompetitive *effects* in the given circumstances.

5. *Two decisions of the Italian Competition Authority concerning the assessment of facilitating practices.*

5.1 *The car insurance information sharing.*

The car insurance agreement[26] involved - along with other minor issues - a concerted practice of information sharing, concerning both aggregate and individual data. The former included data such as revenues from sales of insurance policies, accidents disaggregated according to the Italian provinces, standard terms of communication between the insurer and the insured, and so on. Such *aggregate* data extended well beyond the kind of information that

[26] See Autorità garante della concorrenza e del mercato, *RC Auto*, provv. n.8546, 28 luglio 2000.

insurance firms can legally share according to the exception granted by the European Regulation (this information is indeed provided by ISVAP, i.e., the Italian industry regulator). Yet, still more relevant from the perspective of competition law was the exchange of *individual* data, which included current prices for each "individual" risk.

Risks were classified along nine dimensions (namely, maximum insured value, type of car, age of car, previous accidents, residence, sex, age, length of driving experience and profession of the insured), each admitting of a varying number of values (from twelve to more than one hundred). Each firm was asked to report its "basic price" for car insurance, together with nine vectors (one for each dimension of risk) of "correcting factors". Thus an extremely fine disaggregation of risks was obtained[27]. As it resulted in a matrix with more than 3.000 billions of cells, the overwhelming greater part of the classified individual risks were in fact purely hypothetical. Each firm named its current price for each type of risk and conveyed the resulting matrix to an independent professional firm that was paid for receiving the information, just doing a little of data homogenisation, and then disseminating the results in return to all firms participating in the agreement. The transmission of data took place with accelerating frequency, starting from once a year in earlier times (namely, late '80s and beginning of the '90s) to quarterly transmission in recent years. The accelerating frequency of data transmission was correlated with an equally accelerating frequency of price revision by the largest majority of participating firms.

Information sharing is an old issue in competition law. According to the US tradition, firms can be charged for infringement of the Sherman Act (n. 1) only *if* the plaintiff can prove that the defendants used the shared information for collusive purposes. In other words, an understanding to fix prices, quantities or market shares must be anyhow detected and the sharing of information can only be admitted as a facilitating practice of an *otherwise* extant, directly collusive, agreement. However, within the European Community, the competitive assessment of information sharing agreements underwent major changes in the last decade, when in a recent case[28] the European Commission was concerned with whether information sharing *in itself* is a direct infringement of art.85 (now art.81) of the Treaty of Rome.

[27] It is worth noticing that the information did not concern individual customers' risks and behaviour. Thus the exchange could not be explained as intended at reducing the insurance sector's typical asymmetry of information.
[28] See European Commission, *UK Agricultural Tractor Registration Exchange*, 1992.

A couple of arguments are commonly put forward to challenge an information sharing agreement under competition law. First, information sharing rules away the possibility for firms of making *independent decisions*. Second, information sharing artificially increases market transparency, thus reducing or even removing the risks of secret price cutting by competitors and substituting practical co-operation for the risks inherent in competition.

Both arguments deserve elaboration. In section 3, I have discussed at lenght the former, namely the ambiguity of the concept of independent decision making as the benchmark of competitive behaviour in oligopoly. As to the latter, one has to consider that, *ceteris paribus*, to reduce market uncertainty and competitive risks improves welfare. Moreover, market transparency usually goes along with better competitive conditions, whereas lack of transparency - such as the one that allows for "secret price-cutting" - involves higher consumers' search costs that give rise to monopolistic outcomes. However, the crucial element in an information sharing agreement is that it is aimed at raising transparency *among producers*. No care is taken that information extends downstream to consumers, a result that is sometimes, on the contrary, carefully avoided. As the dissemination of information concerns only a subset of the economic subjects interacting in the market, namely the producers, it is incorrect to speak about "market transparency". This implies that the effects of information sharing are to be analysed not with a view at the market interaction, but by looking at the internal organisation of the producers' subsociety[29].

As the survey by Kühn and Vives (1995) clarifies, very little can we learn for purposes of competition policy from the literature that analyses the sharing of information among producers having regard to their *static* interaction. On the one hand, every firm always benefits from being better informed (this is the so-called precision effect). On the other hand, firm's incentives to exchange information with competitors greatly vary according to the strategic variables used (whether firms compete on prices or on quantities), and the type of uncertainty (whether information concerns common or private values of costs or demand).Thus, in a number of circumstances, firms can have an incentive to exchange information independently of a concomitant, let alone unique, collusive intent. Moreover, the welfare effects - both in terms of total welfare and consumer surplus - also crucially depend on the industry

[29] To be sure, producers' interaction is equally affected when market transparency (that is, transparency toward all subjects interacting in the market) increases. In these circumstances the benefits of market transparency must be accurately assessed and traded off with the costs of producers modifying their strategic interaction due to the better information they can enjoy. On the point, see a recent paper by Møllgaard and Overgaard (2001).

characteristics, such as the number of firms, the degree of goods substitutability, the strategic variable and the type of information.

Whereas no clear-cut conclusions can be drawn about firms' intent and welfare consequences of information sharing in static contexts, a significantly different picture arises when the exchange of information is consistently framed in a dynamic context (that is, when the information concerning one period is exchanged to be used for decision in another period) and information concerns individual strategic variables. Under those circumstances, the exchange of information significantly enlarges the scope for collusive behaviour for, at least, two reasons. First, it reinforces the conditions on which the enforcement of the collusive agreement rests. In particular, the exchange of information on strategic variables allows for more tailored and prompt replies, thus weakening the incentive to deviate form the collusive solution. Second, it raises the gains from collusion, by avoiding phases of low profits that, under imperfect information, are inevitably required by a collusive agreement even in the equilibrium path. To this, it must also be added that it is not easy to see a rationale for such kind of information exchange other than the one of easing collusion.

Thus, a formal covenant or a concerted practice of information sharing is a typical *facilitating practice* as described in the preceding section. It is an agreement whereby the producers set up an artificial device, i.e., a mechanism that modifies the environment in which each one of them will make its own strategic market decision[30] The relevant point is that, *provided an* information sharing agreement is at work, a collusive outcome is more easily attained by firms playing the corresponding Nash strategies of the dynamic (indefinitely repeated) game. This rules away the need for an agreement on the strategic variable, that each firm will play *independently*, that is with no more co-ordination than is required for firms to adhere to any other Nash strategy of the game. Thus, the relevant anticompetitive agreement is the one that takes place a step back: this is the agreement to share information, which fully satisfies the requirement of an infringement of Art.85 (now 81) of the Treaty of Rome.

For the reasons explained above, the prevailing case-law - which requires information sharing to be a *facilitating* device, only to be alleged as a

[30] It is worth emphasising that the "collusive" benefits of an information sharing agreement are higher when the number of producers is large in the market, as reciprocal independent observation becomes cumbersome and very costly under these circumstances.

supplementary evidence of a larger agreement - is unsatisfactory. The crucial step forward was made, in Europe, with the Commission's decision in *UK Tractors* - a decision also confirmed by the European Court of Justice - whereby an information sharing agreement *as such* was condemned as an infringement of Art.85 (now 81) of the Treaty of Rome. The Italian Competition Authority fully joined the Commission's approach in the car insurance case, when a concerted practice of information sharing was condemned for its anticompetitive *object*.

In accordance with the analysis followed by the European Commission, the Italian Competition Authority firstly distinguished among different types of information, to clarify whether the sharing was to involve illegal conduct or to rest within the firms' allowed set of decisions. The general criterion was to consider unlawful only the information sharing that concerned *individual*, *strategic* variables - provided the information did not consist in announcements to consumers - thus leaving within the firms' free sphere of action the sharing of both individual and aggregate data on demand or cost variables. In fact such criterion only provides a pragmatically satisfying solution[31]. On the one hand, the sharing of individualised, or even aggregate, cost and demand data can be agreed by firms with a conscious collusive mind. This notwithstanding, it will, in principle, be allowed. On the other hand, even for the sharing of individualised strategic variables, economic analysis does not provide us with the strong "only if" proposition we would really need, such as "Producers will have an incentive to exchange the following information *only if* they have a collusive intent". As we shall see, a clear-cut legal prescription can be more rigorously supported by economic analysis in a different sort of facilitating practice, namely resale price maintenance.

5.2 *The resale price maintenance agreement in the gasoline sector.*

The gasoline agreement was a sophisticated case of collusive resale price maintenance. Due to a norm that specifically stated that the decision on the retail price of gasoline was up to gasoline retailers, producers could not directly impose a resale price. However, the same norm allowed them to name a "suggested" price. Retailers were in no way obliged to adhere to it, rather they were free to under- or even overprice. Under those circumstances, the producers concerted the following practice[32]: (i) the transfer price to retailers

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[31] See Kühn and Vives (1995) and Kühn (2001).

[32] The formal agreements of which evidence was found were only the *vertical* agreements between every producer and its retailers.

was to be determined by subtracting a given amount (a discount) *d* from the suggested price; (ii) the amount *d* was to vary among retailers, and had to be inversely related to the amount of the gasoline sold.

Note that neither the suggested price, nor the discount *d*, nor even the vector of the latter's different values, were agreed upon by the producers. Only the general rule that the discount had to be inversely related to the retailer's sales was agreed upon. This however was enough for a collusive market equilibrium to ensue. As the discount would have been reduced, had sales increased, it was not rational for any retailer to reduce the price in order to increase its sales. At the same time overpricing (with respect to the suggested price) was strictly monitored and retailers were directly deterred from resorting to it. Again, the Italian Antitrust Authority was confronted with an *artificial* mechanism that, in the specific circumstances, was intended to turn the suggested price into a collusive parallel resale price maintenance.

The notion of resale price maintenance lies at the intersection of competition law and the economic analysis of the firm. Competition law was traditionally concerned with resale price maintenance as a *vertical* restrictive practice mainly aimed at hindering intrabrand competition. Vertical restraints underwent major revision during the Seventies, when the advances in the economic analysis of the firm - that stemmed out from a unique co-operation between economic and legal scholars in Chicago - made clear that several vertical contractual relations can be efficiency-enhancing, thus paving the way for a *rule-of-reason* treatment of vertical restraints in the implementation of competition law. The Courts, however, only allowed for the *rule-of-reason* approach in case of non-price vertical restraint, whereas retained the *per se* illegality whenever price vertical restraints were concerned.

Such distinction between price and non-price restraints finds no basis in the economic theory of the firm, as both restraints may equally, and often interchangeably, either improve or harm vertical efficiency. In fact, in the early days of Law and Economics, precisely "fair trade", i.e., resale price maintenance, was among the typical instances of vertical restraints set to enhance efficiency by solving free-riding problems among retailers[33].

[33] See Telser (1960). Notice that, according to Telser's argument, welfare is enhanced precisely because intrabrand competition is restricted.

Whereas the rationale for the *per se* illegality of resale price maintenance cannot be found in the theory of the firm and in the analysis of vertical integration, popular wisdom has traditionally held that resale price maintenance is to be viewed as a practice that facilitates horizontal agreements, thus hindering *interbrand* competition. The analytical proof of such wisdom was however missing for a long time. It has been only recently provided by a joint paper by Bruno Jullien and Patrick Rey[34]. Such paper has been pretty popular in the Italian debate on competition law. I will not enter the analytics of it, but I want to emphasise the crucial result in my perspective, namely that resale price maintenance facilitates collusion and harms total welfare *whenever* the firms have an incentive to adopt it[35]. Thus, to my view, the paper provides the analytical basis on which the decision of the Italian Competition Authority rests: the concerted practice among gasoline producers - which implemented a common mechanism in order to induce retailers to adhere to the "suggested price" - had a definite anticompetitive *obiect*.

6. *Public Choice and the legal approach to oligopolies.*

In the preceding section I have commented on two recent cases whereby the Italian Antitrust Authority condemned two facilitating practices for their anticompetitive object. As was to be expected, parties appealed against the decisions by raising a number of different issues. To tell you now how the story developed helps me introduce my last theme.

In Italy parties can appeal to the Regional Administrative Court against all decisions of the Antitrust Authority, while in the second instance a further appeal can be brought before the Consiglio di Stato. The Regional Administrative Court upheld both Antitrust Autorithy's decisions, although with minor modifications in the gasoline case - as the Court held that the participation of a minor firm in the agreement had not been adequately proved. In particular, in both cases, the Court fully confirmed the Antitrust Authority's assessment on the following points: (i) that an agreement - in the form of a concerted practice - had been correctly proved; (ii) that the content of the agreement was the implementation of a facilitating practice; (iii) that the agreement on the facilitating practice represented an infringement of the Italian Competition Law because of its anticompetitive *object*[36].

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[34] See Jullien and Rey (2000).

[35] Jullien and Rey's argument does not rule away the Chicago School's *vertical* rationale for resale price maintenance. However, it allows to assess it in a clear-cut framework.

[36] The Regional Administrative Court, in accordance with the European Court of Justice, has in recent times systematically repealed the parties' recurrent argument according to which the anticompetitive *object* can

However, in the second instance, the Consiglio di Stato repealed the Antitrust Authority's and the Regional Administrative Court's decisions on the gasoline case[37].

Let me say, first of all, that whereas the Regional Administrative Court had fully supported the Antitrust Authority's analysis - namely the anticompetitive object of the common understanding of gasoline producers on the facilitating practice, consisting in a mechanism design to induce retailers to fully adhere to the "suggested price" of the gasoline - the Consiglio di Stato focused on a different *procedural* issue. Indeed in a hasty passage, it stated that the "parallel behaviour" had been "objectively anticompetitive", a statement I might take as a confirmation of the competitive evaluation of the case[38]. However, as the decision was overruled, the statement is scarcely comforting. I do not intend to dwell on the procedural grounds of the repeal. Instead, I want to focus on a statement purposefully added by the Consiglio di Stato in support of a further argument of the firms (in spite of the explicit consideration that enough grounds for the repeal had already been given).

The parties had argued that vertical agreements between producers and retailers had been repeatedly solicited by the Ministry of Trade and that some meetings had taken place in the Ministry's premises. Thus, it was the firms' claim, the challenged behaviour was immune from competition law. In fact, as noticed above, competition law only applies to firms' *private* behaviour, whereas anticompetitive behaviour enjoys, in principle, antitrust immunity if it is performed following a statutory norm or a regulation.

I have already recalled the utter contrast on the point between the legal theory of competition and the classical economic approach to oligopolistic behaviour. The latter might be resumed, in a modern perspective, by integrating game-theoretical oligopoly theory with Public Choice analysis. It is instructive to see whether regular conditions can be detected behind norm-based support to collusive behaviour. Let us start from the basic intuition according to which oligopolies, as collective bodies, often have to devise

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only be imputed to the firms when a formal covenant is proved, whereas the actual specific *effects* ought not to be left out of consideration in case of concerted practices. I take this to be evidence of the European Court's effort to make the legal rule more precise in discerning lawful from unlawful behaviour, thus providing firms with rules of conduct that are both simple and easily understandable.

[37] The Consiglio di Stato has not yet given its decision on the car insurance case.

[38] For the sake of completeness, it must also be added that, in a different passage, the Consiglio di Stato found a valuable, pro-consumers, effect of the agreement in the parties' alleged intent to also prevent *overpricing* by retailers. It should be noted, however, that parties had to resort to *direct* monitoring in order to prevent overpricing, as the control of the latter was beyond the reach of the challenged incentive mechanism.

artificial arrangements in order to solve the "oligopoly problem", i.e., in order to efficiently co-ordinate their members in taking strategic decisions. The array of the alternatives is varied, as the efficient "artifice" depends upon the environment. The search for legal support, in order to have behaviour co-ordinated under the protection possibly granted by the law, can, under given circumstances, emerge as a possible efficient design for oligopolists, when the costs and benefits of every alternative way to attain a collusive equilibrium are carefully compared.

I am inclined to assume that, for that outcome to normally obtain, the relevant circumstances should be chiefly related with the number of oligopolists. It is a crucial result in oligopoly theory that it is harder to collude when there are more firms in the market. On the one hand, the number of firms impinges on the effectiveness of the mechanism of *internal* enforcement of collusive behaviour[39]. On the other hand, co-ordination as such, on both the collusive solution and, particularly, the selection of the punishment strategy, becomes more cumbersome as the number of producers increases. However this result ignores that collusive equilibria in the industry may also be supported by mechanisms of enforcement of a different kind[40], that is by *different* solutions of the *same* oligopoly problem. In particular, when the number of the oligopolists is large, a *Leviathan*, i.e. an external enforcer, can help. Indeed, *Leviathan* "institutionalises" the collusive equilibrium with two main effects: it allows co-ordination to be induced by rule and raises the costs of retaliation beyond the expected flow of the difference between collusive and competitive profits[41].

The emerging scenario shows a crucial difference: when oligopolists resort to an external enforcement, two sorts of collusive behaviour, each undertaken in a different stage, come into play. In the former stage, producers reach the common understanding to petition for political and/or legal protection. In the latter stage, producers effectively co-ordinate their anticompetitive behaviour, under the protection possibly granted by the law.

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[39] When there are more firms in the market, the incentives to cheat on collusion are higher, because a greater market share can be gained by undercutting the competitors' price. Moreover the expected costs of retaliation are smaller, as a larger number of firms share the collusive rents.

[40] In fact, collusive solutions are frequently observed also in industries with large n, where n is the number of producers. A crucial empirical characteristic of such collusive solutions is that, apart from cases in which entry is strictly blockaded, the observed n is normally bigger if collusion is at work. This implies that inefficiencies are higher, the higher n is, because firms are farther below their efficient size. The analysis of a number of "regulated" industries with a large number of producers (such as banking, professional services, and so on) seems to support this conclusion.

[41] The argument is of course not new. You can find it expounded at length by A. Smith (1982), book 1, chapter X, part II.

The need to keep the two "understandings" distinct becomes clear when one considers that, whereas co-ordination in the second stage is sufficient condition for the collusive outcome to ensue, the same conclusion cannot hold true as far as the agreement in the first stage is concerned. *Leviathan* must, of course, consent to act as an external enforcer, a circumstance which displaces the issue from the economic to the political arena.

The extent to which an antitrust immunity can be granted to norm-protected anticompetitive behaviour is built, respectively in the U.S. and in the European competition law, on the distinction of the two different stages, and on the need to separately assess them. In particular, an important difference in the assessment of the second stage emerges in the two legal systems. Consider, to start with, the first stage. Here, the general conclusion is shared that, since constitutional regimes entitle all citizens to a very far-reaching right to petitioning, to condemn the first stage agreement as illegitimate for antitrust purposes would mean to deprive citizens of a fundamental constitutional right. Thus, full antitrust immunity for joint petitioning is explicitly provided in the U.S. Antitrust Law under the label of "Noerr" immunity[42]. The same immunity has also been explicitly recognised by the European Court of Justice in the *Meng* case[43]. In contrast, a difference emerges in the assessment of the anticompetitive behaviour in the second-stage.

According to the U.S. Competition Law, a careful evaluation of both following conditions is in order: (i) whether the compelled anticompetitive behaviour is clearly articulated and affirmatively expressed as public regulation; (ii) whether the private decisions with anticompetitive potential are adequately supervised by an agency of the state or local government imposing the regulation. Provided the two questions receive an affirmative answer, the collusive behaviour cannot be challenged under the U.S. competition law. However, if firms act beyond the boundaries set by the norm or if the agency itself merely rubber-stamps the content of the firms' agreement, then the collusive behaviour can lawfully be put under antitrust scrutiny. Such, so-called, antitrust "State Action" doctrine, in the U.S., applies to both state (or local government) and federal regulations conflicting with *federal* antitrust law.

In Europe, a different legal approach prevails, which insists on the relationship between competition law and the regulatory norm, in the light of

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[42] See *Eastern Railroad Presidents Conference v. Noerr Motor Freight Inc.* (1961), 365 U.S. 137.
[43] C-2/91 *Meng* (1993).

the Member States' obligation to abide by the general principles of the European Treaty. Since the Treaty of Rome prevents member States from introducing measures involving prejudice of the Community goals, among which is competition, a member State's anticompetitive regulation is straightforwardly in contrast with the European Treaty. Thus the member State is under obligation to set the regulatory norm aside. This makes antitrust inspection in Europe, with respect to the U.S., shift from firms' behaviour to the norm: whereas private behaviour is disregarded for being entirely absorbed by the norm[44], the latter's anticompetitive potential can only be removed by appealing to the contrast between the national norm and the E.C. Treaty.

When anticompetitive behaviour, protected by a member State's regulation, is challenged by the same member State's national competition law, it is less clear how the contrast between the regulation and the competition law can be settled. The national case-law is indeed short, although there is a general agreement on the criterion that a *formal* ex-ante prescription, or a *formal* ex-post approval, should be required for the challenged private behaviour to enjoy antitrust immunity, whereas behaviour that unduly exploits a generic regulation should not be exempted from antitrust scrutiny. The Italian Antitrust Authority recently made an analytical effort to creep into a detailed distinction between behaviour compelled by regulation and behaviour arising out of the private agents' free sphere of action. The case[45] concerned two closely related professional associations that had identically and in detail determined the professional fees, in spite of the norm prescribing that each association should only be consulted by the governmental agency who was in charge of fixing the respective fee. In revising the Antitrust Authority's decision, the Regional Administrative Court clarified that, notwithstanding apparent discrepancies between behaviour prescribed by the norm and

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[44] This of course holds only for behaviour that firms can prove to be compelled by the norm or the regulation. However, in contrast with the U.S. antitrust "State action", the European approach takes on a formal perspective. Collusive behaviour is absorbed even if the regulation practically rubber-stamps the decision taken by private agents. The *Reiff* (1993) case is instructive in this respect. The fees for long-run distance hauling by road were in Germany fixed by a specific board of experts appointed by the Ministry of Transportations. However the experts were chosen out of candidates of firms' association. Maybe under the influence of the U.S. State Action doctrine, the European Court of Justice wanted to consider whether the fee schedule so determined had been adequately supervised by the public authority before being approved of and made compulsory. In giving the ECJ his opinion, the Commission *denied* supervision on the consideration that, *as a matter of fact*, the appointed board reflected the interests of the industry association, and that again *as a matter of fact*, there had been delegation of the public authority. In contrast with the opinion of the European Commission, the ECJ found that there had been supervision, and no delegation. However in the search for supervision, the ECJ was more concerned with formal requisites than with actual behaviour (the members of the board were "experts" called on the fix the fees on the basis of public interest considerations, and limitations in the criteria to be followed were considered to be sufficient to ruling out delegation, as the Ministry still retained the power of changing the fees fixed by the board).

[45] See Autorità garante della concorrenza e del mercato, *Consigli Nazionali dei ragionieri e periti commerciali e dei dottori commercialisti*, provv. n.6601, 26 novembre 1998.

behaviour actually performed by the two associations, the ex-post formally proper approval by the governmental agency absorbed and fully incorporated the associations' conduct.

This lengthy detour was intended to introduce my concluding comment on the decision of the Supreme Administrative Court on the gasoline case. Indeed, in the latter no formal approval of any sort of the challenged behaviour was ever involved. Yet, the Consiglio di Stato stated that "the challenged behaviour can be understood when framed within a regulatory system" that - though neither fully prescribing the *objectively anticompetitive* conduct nor giving formal approval of it - "provides, by means of the *factum principis*, the method by which the collusive equilibrium can be attained"[46]. Thus, antitrust immunity was granted by referring to a generic "regulatory system" and by letting the *factum principis* extend well beyond a "clearly articulated and affirmatively expressed" public regulation, as required, for instance, by the U.S. "State action doctrine". The decision conflicts not only with well-established principles in the U.S. antitrust law, but, also, more importantly, with the more formal approach of the European Court of Justice in identifying behaviour absorbed by the norm.

However, to my view, a more general consideration is to drawn. A lot of the actual working of oligopolistic markets is doomed to go missed, if the current devide between firms' private behaviour and behaviour protected by statutory norms or regulations, as stated in current competition law, will not be subject in the future to a vigorous theoretical reassessment in the economic perspective. We strongly need an overall encompassing perspective that helps us understand the "organisation" of oligopolies also as an issue in the economics of institutions, and the alternative institutional arrangements we observe in reality as alternative solutions of the same "oligopoly problem". This is a field where a tight integration of oligopoly theory with public choice analysis to overcome the current shortcomings will in the future be greatly wanted.

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[46] Let me emphasise again that, by stating that the challenged behaviour was "objectively anticompetitive", the Consiglio di Stato in a sense confirmed the economic analysis of the Antitrust Authority.

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