INFORMATION EXCHANGES BETWEEN COMPETITORS UNDER COMPETITION LAW

-- Background Paper --

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The full set of materials for this roundtable discussion including country submissions and contributions from experts can be found at http://www.oecd.org/dataoecd/12/52/48379006.pdf as well as on the LACF website.
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BACKGROUND PAPER

By the Secretariat

1. Introduction

1. Explicit, "naked" cartels are almost universally condemned as unlawful. Conversely, conduct resulting purely from oligopolistic interdependence (tacit collusion) is not seen as a competition law violation. In between, firms can engage in a range of practices to reduce strategic uncertainty and more effectively coordinate their conduct. These strategies may include unilateral communication to the market about future strategies, information exchanges, such as “cheap talk” about planned price increases, capacity, or other future conduct, and more formalized industry wide information sharing systems.

2. Information exchanges among firms increase transparency in the market to the benefit of consumers, for example, by reducing search costs and helping consumers to choose products more effectively. But transparency might have the opposite effect. In some situations, such as in sufficiently concentrated markets, transparency can harm consumers if it enables firms to tacitly collude to increase prices, share or allocate markets or if it makes it easier for co-operating firms to detect and therefore punish deviating firms. Such negative impact is likely in markets already prone to anti-competitive coordination because of their structural characteristics.

3. Making a distinction between purely unilateral conduct, such as unilateral communications, that falls outside the reach of laws against restrictive agreements and coordinated conduct which could in principle fall within these laws, can be a difficult task for competition enforcers. In the past, many competition agencies have assessed information exchanges as instruments of anti-competitive cartelisation or of pro-competitive market transparency, taking into account a number of key factors including the type and nature of the information exchanged and the structure of the market involved.

4. With few exceptions, competition laws on horizontal agreements do not explicitly list the exchange of information among anti-competitive practices. The law on information exchange therefore originates predominantly from the agencies’ enforcement practice and from the jurisprudence of the courts. Information exchanges can be looked at in a number of contexts, but generally speaking competition

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1 This paper was prepared by Antonio Capobianco of the OECD Secretariat.

2 In Mexico, for example, Article 9 of the Mexican Competition Act has a direct reference to “exchange of information” which is explicitly forbidden when the object or effect of the exchange is to fix, increase or manipulate prices.

3 Kühn and Vives (1994) suggest that information exchange under European law could potentially be covered in the following ways: (i) as part of a larger prohibited agreement like price fixing; (ii) as an indirect way of price fixing; (iii) as sufficient evidence of the existence of an illegal agreement; (iv) as a necessary condition for sustaining the illegal agreement and illegal as a facilitating device; (v) as an illegal agreement in itself that restricts or distorts competition.
agencies have assessed information exchange schemes in three specific situations: (i) when the information sharing is part of a broader cartel infringement; (ii) when the information exchange is part of a wider cooperation agreement, such as a joint venture agreement, a standardisation or a R&D agreement; (iii) when the information sharing is a stand-alone practice, i.e., it is not part of a cartel or of a wider arrangement.

5. The analysis of the first two types of information exchanges is relatively straightforward. Competition agencies assess the possible restrictive effects of such practices in the broader context of the cartel or the agreement to which they are ancillary. This paper focuses principally on the third type of exchanges, i.e., stand-alone information sharing schemes. The approach to these types of information exchanges is more complex, because prohibiting them implies that these information exchanges are anti-competitive in themselves, without there being any other evidence of collusion (e.g., a price fixing or another hard core restriction). Many agencies concur in concluding that an agreement between competitors to exchange confidential information, which has as its object or effect to distort competition, would normally be considered as incompatible with rules that prohibit anti-competitive agreements and practices. However, often there is no agreement to exchange information for anticompetitive purposes. The issue is thus to determine in which cases the exchange of information would effectively violate those rules. The concept of a concerted practice is often used to address these situations.

6. This paper is structured along the following lines:

- First, it will describe the pro-competitive effects of enhanced transparency due to information sharing for both suppliers and consumers, and the risks that, in certain circumstance, this enhanced transparency may raise for competition.
- Second, it will discuss the various forms which information sharing can take and how these various forms can affect the enforcement of competition rules.
- Third, the paper will look at the experience with the enforcement of competition rules against information exchange practices in selected jurisdictions.

4 See Bennett and Collins, 2010.
5 It will not deal with information sharing schemes in the context of unilateral conduct rules within the context of merger negotiations. Concerning contacts between the merging parties in the planning stage of the merger, it is sufficient to note that they could lead to anti-competitive coordination, should the merger negotiation fall apart. Competition agencies recognize the importance of these pre-merger contacts, and have provided a large volume of guidance over the years on appropriate pre-merger activities. See for example, Blumenthal, 2005; Morse, 2002; Sipple, 2000.
6 Paragraph 56 of the Draft Guidelines on the application of Article 101 Treaty on the Functioning of the European Union (the ‘TFEU’) to horizontal agreements: “In line with the jurisprudence of the Court of Justice of the European Union, the concept of a concerted practice refers to a form of coordination between undertakings by which, without it having reached the stage where an agreement properly so-called has been concluded, practical cooperation between them is knowingly substituted for the risks of competition. If there is no agreement on information exchange, it will have to be assessed on a case-by-case basis whether a concerted practice can be found or whether, for example, the regular dissemination of information of a company is a truly unilateral action which does not fall within the scope of Article 101(1).” However, where only one undertaking discloses information and (an)other undertaking(s) accept(s) it, there can also be a concerted practice. See for example Joined Cases T-25/95 etc., Ciments CBR and Others v Commission, [2000] ECR II-491, paragraph 1849: “[...] the concept of concerted practice does in fact imply the existence of reciprocal contacts [...]. That condition is met where one competitor discloses its future intentions or conduct on the market to another when the latter requests it or, at the very least, accepts it.”
• Fourth, it will review the main factors that agencies take into account when determining if an exchange of information has anticompetitive effects or not.

• Finally, the paper will draw some conclusions from a competition policy perspective.

2. Benefits and risks of enhanced market transparency

The economic literature has historically placed the role of transparency and access to information at the centre of the competition process and of the economic benefits generated. The economic thinking on market transparency and its relevance for antitrust purposes is two-sided. In 1776 Adam Smith warned us about the possible consequences on competition of competitors communications, but in order for the invisible hand to produce benefits for the whole society it is necessary that independent actors can plan and conduct their economic activity by relying on price signals. Market transparency, therefore, is a factor which can promote or restrict competition depending on the circumstances.

Increased market transparency is perceived as a factor to be encouraged; after all, the ideal model of perfect competition is premised on demand-side and supply-side perfect information about the market. On the supply-side, the knowledge of the market and its key features (e.g., characteristics of demand, available production capacity, investment plans, etc.) facilitates the development of efficient and effective commercial strategies by market players. New entrants or fringe players may benefit from this information and enter the market more effectively and compete more fiercely against incumbents. Increased knowledge of market conditions also benefits consumers, who can choose between competing products with a better understanding of the product characteristics; customers can also compare terms and conditions of the various offerings and freely choose the most suitable one for their needs. In addition, enhanced transparency benefits consumers by lowering search costs.

Increased transparency, on the other hand, is one of the facilitating factors required for tacit collusion to be sustainable. In order to reach terms of coordination, to monitor compliance with such terms and to effectively punish deviations, companies need to acquire detailed knowledge of competitors’ pricing and/or output strategies. The artificial removal of the uncertainty about competitors’ actions, which is at the basis of the competitive process, can in itself eliminate the normal competitive rivalry. This is particularly the case in highly concentrated markets where increased transparency enables companies to better predict or anticipate the conduct of their competitors and thus align themselves to it.

In the next paragraphs, the potential pro- and anti-competitive effects of information exchanges will be discussed in turn.

2.1 Possible pro-competitive effects of information exchanges

If information exchange does not give rise to the competition concerns which will be discussed further below, it will almost always be positive to welfare. Indeed, the benefits from information exchange can be significant both for suppliers and customers.

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7 In The Wealth of Nation of 1776, Adam Smith observed: “People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.” (Vol. I, Bk. I, Ch. 10 (1776).

8 See Mollgard and Overgaard, 2001; Philips, 1988.


10 See, Court of Justice of the European Union (the ‘CJEU’) in Case C-8/08, T-Mobile, of 4 June 2009, para 33.
2.1.1 Potential benefits for suppliers

In numerous circumstances, information exchange between competitors can help to make markets work better. These benefits should in turn help firms to compete more effectively in the market, ultimately resulting in an increased social welfare. However, as it will be discussed below, the existence of such benefits should not justify information exchanges under any circumstance, but should be taken into consideration by competition agencies when assessing if an information exchange has pro or anti-competitive effects. Some of the potential benefits of transparency for suppliers are discussed below.

- An in-depth knowledge of the market and of its key features facilitates the development of efficient and effective commercial strategies by market players and enables firms to make pricing decisions on the basis of a more complete understanding of the market. Similarly, increased transparency benefits new entrants or fringe players and enables them to enter the market more effectively and to compete more fiercely. Better information allows companies to better understand market trends and to adapt their strategy to better match supply with demand. Information exchange can also improve the distribution system and the marketing strategies of firms, leading to beneficial effects.

- Information exchange can improve product positioning, particularly in industries with product differentiation or in multimarket industries. Experimental evidence indicates that lack of information may induce firms to position their products in a way that neither maximises their profits nor consumer welfare. Allowing information exchange in these settings can therefore improve consumer surplus and welfare.

- In markets characterised by large fluctuations of demand, firms tend to keep substantial inventories in order to be able to meet demand at peak times. If information exchange increases firms’ ability to forecast demand fluctuations, they can increase economic efficiency by enabling firms to optimise inventories and to avoid shortages or overproduction.

- Better information flows allow firms to benchmark themselves in critical areas against their competitors. Benchmarking (i.e., comparing individual performance with the aggregated performance of the industry) is an example of how information can be used by companies to enhance their internal efficiency. Whether benchmarking may result in an illegal exchange of sensitive information depends on how the benchmarking study is structured. In general, to

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11 In a world without information about demand and rivals’ activities, firms would have to permanently adapt to changing circumstances by a trial and error process. As stated by a Commissioner of the US Federal Trade Commission: “Information about prices helps businesses make informed decisions about the prices at which they will offer their products and services, eliminating the need for a more costly trial and error process. Price information is useful to both consumers and businesses to inform buying decisions.” (Azcuenaga 1994, p. 4).


13 See Novshek, 1996.

14 See Matutes, 2001; see also RBB Economics, 2009.

15 See Bennett and Collins, 2010; Capobianco, 2004; Vives, 2002.

16 For example, where an independent company collects and processes individual sale data from the market players and then provides this information, including their individual market share, back to each of them separately.

prepare a benchmarking system only a limited degree of disaggregation of the information is needed; this makes dissemination of sensitive information a minor threat compared to the apparent efficiency gains that such a practice has on firms’ performance.

- Although there is little empirical evidence in the economic literature on this, information exchange may also improve companies’ investment decisions. As Hovenkamp points out: “firms respond to uncertainty by being less aggressive. If the manufacturer has no idea about future demand for its product, it will hedge its bets, which in this case means building a smaller plant or making fewer purchases of inputs. By contrast, good market information reduces uncertainty and gives sellers more confidence about their investment and, accordingly, more incentive to invest” and “generalised pricing, output and inventory data can be useful in guiding firms to make intelligent decisions about how much to invest in plant and equipment, how much to plan on producing the following year, and the like.”

- There are industry sectors where a certain degree of transparency is required for the industry to work effectively. For example, in the banking and insurance industries, information sharing on individual consumers’ risks can reduce the problems of adverse selection (where firms cannot tell good consumers from bad consumers) and moral hazard (where a consumer who is protected from risk may behave differently than if fully exposed to the risk). In these circumstances, information sharing mechanisms fill an asymmetry of information about customers and thus allow the industry to operate efficiently.

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18 Christiansen and Caves (1997) have looked at the impact of the exchange of information on capacity expansion in the pulp and paper industry and at its effect on the investment rivalry. They note that if markets are not too concentrated, non-binding information exchange (“cheap talk”) can solving the strategic uncertainty about rivals’ investment decisions and may therefore improve economic efficiency overall.

19 See, Hovenkamp, 1999, p. 43 et seq. It has also been argued that “neglecting the role of information exchange on investment decisions implies neglecting potentially large costs for consumers leading to distortions with respect to product quality, product variety, location and the future ability to respond to demand changes” (see Nitsche and von Hinten-Reed, 2004).

20 See Padilla and Pagano, 1999. The authors, however, conclude that sharing more detailed information can reduce the disciplinary effect of the information exchange and that borrowers’ incentives to perform may be greater when lenders only disclose past defaults than when they share all their information.
Box 1. Information exchanges in the insurance sector

It is recognized that in the insurance sector a certain degree of cooperation between competitors is necessary to the correct functioning of the industry itself and, furthermore, it leads to an increase of competition between the insurance companies. For this reason, the European Commission has adopted a Block Exemption Regulation to exempt categories of horizontal agreements between insurance companies. The rationale for block exempting certain information flows within the insurance sector is that calculations, tables and studies make it possible to improve the knowledge of risks and facilitate the rating of risks for individual companies. This can in turn facilitate market entry and thus ultimately benefit consumers. However, no unnecessary restrictions of competition are covered by the block exemption. For instance, agreements on commercial premiums are not exempted; and calculations, tables or studies are only exempted if they (a) do not identify the insurance companies concerned or any insured party; (b) when compiled and distributed, include a statement that they are non-binding; and (c) are made available on reasonable and non-discriminatory terms, to any insurance undertaking which requests a copy of them, including insurance undertakings which are not active on the geographical or product market to which those calculations, tables or study results refer.

Box 2. Information exchanges in the banking industry

A similar rationale in the banking industry lead to the creation of public and private credit registers across the EU between 1997 and 2007. The establishment of these registers can facilitate direct entry through a reduction of information asymmetries, which in turn intensifies competition. In the Asnef-Equifax case, the Court of Justice for the European Union (the ‘CJEU’) was asked to review the compatibility with the European competition rules of an online register set up by the Spanish association of financial institutions. The register contained sensitive information on existing and potential borrowers, such as past credit history, failures to pay, outstanding credit balances etc. The purpose of the register was to better inform lenders as to risks connected with granting loans, leading to greater and more efficient availability of credit. The CJEU concluded that the information exchanged on the creditworthiness of potential borrowers served to reduce the risk of lending by reducing the disparity between the information available to credit institutions and that held by potential borrowers. Therefore, the information exchange was capable of reducing the number of borrowers who default on repayments, and hence improved the functioning of the credit supply system as a whole, leading to a more efficient market outcome. As the credit register was designed to limit risks of credit institutions in granting loans, the Court concluded that the exchange of information did not have the object of restricting or distorting competition.

- Finally, information sharing can prove particularly useful in markets where innovation is a significant driver and where significant technological changes occur often or where consumer

21 See Regulation 267/2010 on the application of Article 101(3) of the TFEU to certain categories of agreements, decisions and concerted practices in the insurance sector, in [2010] OJ L 83/1. The Regulation replaces the old block exemption regulations on the insurance sector (Regulation 358/2003, in [1986] OJ L 378/4; and Regulation 3932/92, in [1992] OJ L 398/7). In particular, Article 101 TFEU does not apply to agreements whose object or effect is the joint establishment and distribution of calculations and tables and to the joint carrying-out of studies on the probable impact of general circumstances external to the interested undertakings, either on the frequency or scale of future claims for a given risk or risk category or on the profitability of different types of investments and the distribution of the results of such studies. The term ‘calculation’ refers to calculations of the average cost of covering a specified risk in the past. The term ‘tables’ refers to mortality tables, and tables showing the frequency of illness, accident and invalidity, in connection with insurance involving an element of capitalization.


23 Case C-238/05 of 23 November 2006.
tastes and preferences evolve rapidly. In these conditions, uncertainty affects investment decisions, with greater uncertainty generating a reluctance to invest even when market fundamentals are favourable.\textsuperscript{24} The literature on the dynamics of competition in innovation markets has revealed that forms of cooperation between competitors, including the exchange of information, may be a factor enhancing the innovation process itself and the technological development.\textsuperscript{25} In particular, it has been argued that antitrust agencies should not object to the exchange of sensitive data on individual firms in innovation markets, because the flow of such knowledge in the industry reduces the high degree of uncertainty related to research and development processes.\textsuperscript{26} The reduction of such uncertainty, which can ultimately hamper investments in technology, favours the individual firms’ competitiveness and the overall development of the industry sector. On the other hand, the information flow in these very dynamic markets has very little competitive value and does not allow coordination to take place.

2.1.2 Potential benefits for consumers

13. Increased transparency and better knowledge of market conditions may also benefit consumers. In 1961, Stigler emphasised the importance of search costs for consumers.\textsuperscript{27} Buyers need to identify sellers and their prices, customers need to search for knowledge on the quality of goods. The more information available on the market, i.e., on the products and services and their suppliers, the better placed consumers are to choose between competing products, as they will have a greater understanding of the product characteristics. Consumers can knowledgeably compare terms and conditions of the various offerings and freely choose the most suitable one for their needs. In these circumstances, enhanced transparency can benefit consumers by lowering consumers’ search costs. Behavioural economics has shown that better informed consumers can be instrumental in developing vigorous competition between suppliers.\textsuperscript{28} Economic literature has also shown that information asymmetries and absence of information may not only

\textsuperscript{24} See Berti, 1996.


\textsuperscript{26} An example of such an approach can be found in the European Commission’s Guidelines on the applicability of Article 81\textsuperscript{[now Article 101 TFEU]} of the EC Treaty to horizontal cooperation agreements (in [2001] OJ C 3/2). In the context of standard setting agreements, the Commission recognizes that to materialize the economic benefits of such type of cooperation “the necessary information to apply the standard must be available to those wishing to enter the market [...]” (see para. 169; similar language is included in the Draft Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, SEC(2010) 528/2, para 301). Similarly, the Technology Transfer Block Exemption (See Commission Regulation 772/2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements (in [2004] OJ L 123/11.) allows the licensor to transfer, together with the licensing of know-how, that “practical information, resulting from experience and testing, which is: (i) secret, that is to say, not generally known or easily accessible, (ii) substantial, that is to say, significant and useful for the production of the contract products, and (iii) identified, that is to say, described in a sufficiently comprehensive manner so as to make it possible to verify that it fulfils the criteria of secrecy and substantiality” (see Article 1(i)) (emphasis added). In the Guidelines accompanying the Technology Transfer Block Exemption (in [2004] OJ C 101/2.) the Commission states that it “will take into account to what extent safeguards have been put in place, which ensure that sensitive information is not exchanged. An independent expert or licensing body may play an important role in this respect by ensuring that output and sales data, which may be necessary for the purposes of calculating and verifying royalties is not disclosed to undertakings that compete on affected markets” (see para. 234).

\textsuperscript{27} See Stigler, 1961.

\textsuperscript{28} For a further discussion of this, see Bennett, Fingleton, Fletcher, Hurley and Ruck, 2010.
distort consumer behaviour but may also adversely impact competition and competitive outcomes.\textsuperscript{29} In these circumstances, artificially increased transparency may improve consumer welfare.\textsuperscript{30}

\begin{boxedtext}
\textbf{Box 3. OECD roundtable on competition and regulation in retail banking}

The retail banking sector is an example where the degree of competition is positively correlated to the degree of information available to consumers in the market. The OECD 2006 Roundtable on Competition and Regulation in Retail Banking\textsuperscript{31} concluded that customer mobility and customer choice are essential to stimulate retail-banking competition. In the banking sector, consumers may be tied to their bankers due to the existence of switching costs. This lock-in provides banks with considerable market power.\textsuperscript{32} Banks may compete aggressively \textit{ex ante} for consumers to benefit from \textit{ex post} market power. For this reason, markets with switching costs may overall be less competitive as the presence of such costs tends to soften competition. The Roundtable also indicated that, in order to promote greater willingness of consumers to switch from one financial institution to another and reduce bank rents from switching costs, policy makers should take positive actions including actions aimed at increasing transparency and facilitating the dissemination of information about prices of financial products as a desirable measure to promote consumers’ possibilities to compare financial institutions. Greater consumer education and literacy about financial alternatives may help to promote greater willingness of consumers to switch from one institution to another and reduce bank rents from switching costs.
\end{boxedtext}

\section{2.2 Possible anti-competitive effects of information exchanges}

14. Despite the many pro-competitive aspects of information sharing schemes between competitors, the literature also points out that such schemes may substantially harm consumers. The main way in which information exchanges can harm consumers is by facilitating collusion. Artificially increased transparency can allow firms to engage in, and sustain coordinated behaviour over time. However, whilst the primary concern is coordination, there are other non-coordinated theories of harm.

\subsection{2.2.1 Theories of harm based on coordinated effects}

15. To achieve and maintain over time a successful collusive equilibrium, three conditions must be \textit{cumulatively} present.\textsuperscript{33}

- \textit{First}, the colluding parties must be able to agree on a “common policy” and to monitor whether the other firms are adopting this common policy. It is not enough for each participant to be aware that interdependent market conduct is profitable for all of them, each member must also have a means of knowing whether the other operators are adopting the same strategy and whether they

\textsuperscript{29} See Klemperer, 1995, according to which high switching cost allow firms to maintain higher prices and earn higher profits.

\textsuperscript{30} Bennett and Collins (2010) have, however, emphasised the importance that access to the information must be accompanied by the ability of the consumer to assess it and to act upon it. In this respect, some have warned of the effects on consumer choices and consequently on consumer welfare of firms’ strategies to “overflow” consumers with information on products and services, the only purpose being to complicate the assessment of the information and therefore making consumer choice more difficult. See, for example, Ellison and Ellison, 2009; Gabai and Laibson, 2006.

\textsuperscript{31} See OECD, 2006.

\textsuperscript{32} See Farrell and Klemperer (2006) for a recent overview of switching costs.

\textsuperscript{33} For further details, see Stigler, 1964; Carlton and Perloff, 1990; Phlips, 1995; Ivaldi, Rey, and Tirole, 2003; Scherer and Ross, 1990 and the extensive literature cited in these texts.
are maintaining it. In order to reach terms of coordination and to monitor adherence to them, market transparency is essential.

- Second, coordination must be sustainable – i.e., firms need to have an incentive not to depart from the agreed common policy. This in turn requires an effective retaliation mechanism. Thus, collusion is viable in the long-term only if there are adequate credible deterrence and punishment mechanisms that the cartel can put in place to ensure that no one departs from the common policy.

- Third, the foreseeable reactions of both customers and competitors must not be such as to undermine the common policy. If the jointly achieved price increase is likely to attract new firms in the market, or if customers are sufficiently strong or sophisticated to resist any attempt to jointly raise prices, it is unlikely that a collusive outcome can be achieved. Thus, reactions of current and future competitors, as well as of consumers, can jeopardize the results expected from the common policy.

16. Various factors may facilitate the formation of collusive outcomes. Such factors include the concentrated structure of the market, the homogeneous nature of the product, costs symmetry, high entry/exit barriers, stability of demand and supply conditions, repeated interaction between the firms and multi-market contacts. But collusion can be reached and sustained if firms have complete and perfect information on the main variables of competition, such as the structure of the market, costs of the participants, their market strategies, etc. In this respect, market transparency is therefore a key factor that allows firms to align their strategy more easily and to promptly detect and punish any deviation from the agreed collusive terms. It follows that an information exchange may facilitate collusion if (i) it facilitates the reaching of a common understanding on the terms of coordination; (ii) it helps monitoring whether the terms of coordination are being followed; and (iii) it improves the ability or reduces the cost of punishing deviations from the terms of coordination.

(i) Reaching terms of coordination on prices or volumes may not be easy, particularly when a number of different collusive equilibria are possible. Information sharing arrangements artificially increase market transparency and thus are one of the facilitating factors for collusion.34 Information exchanges can facilitate this exercise as they offer firms points of coordination or focal points.35 In this way, it can help firms to coordinate their behaviour even in the absence of an explicit anti-competitive agreement.

(ii) Artificially increased transparency allows firms to monitor adherence to the collusive arrangement, and provides better information on when and how to punish firms when they deviate.36 For collusion to be sustainable it is necessary that firms can detect deviations from the collusive equilibrium. The sharing of information may therefore support the internal stability of the collusive arrangement through greater precision in punishments of deviations. Firms will be in a better position to identify which firm has deviated and on what product, if they have access to precise and individualised information on their competitors.

34 Albaek et al. 1997, for example, discusses the 1993 decision of the Danish competition authority in the concrete market, where firms decided to gather and publish firm-specific transactions prices for two grades of ready-mixed concrete in three regions of Denmark. Following initial publication, average prices of reported grades increased by 15-20% within one year. The authors investigate whether this was due to a business upturn and/or capacity constraints, but argue that a better explanation is that publication of prices allowed firms to reduce the intensity of oligopoly price competition and, hence, led to increased prices.

35 See Levenstein and Suslow, 2006.

Artificially increased transparency also allows existing firms to better identify opportunities for new entrants to enter the market and coordinate a response. This will increase the stability of the collusive understanding.

17. In light of the above, information exchanges between competing firms can be expected to facilitate collusion when they diminish an existing information asymmetry, improve the accuracy in observing rival behaviour and improve transparency about future strategic intention of rivals.

2.2.2 Theories of harm based on non-coordinated effects

18. Information exchange can also lead to foreclosure effects. This may occur if sharing information between a limited number of competitors gives them a significant competitive advantage over rivals. According to the European Commission’s draft Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements, for example, “an exclusive exchange of information could lead to anti-competitive foreclosure on the same market where the exchange takes place. This can occur when the exchange of commercially sensitive information places unaffiliated competitors at a significant competitive disadvantage as compared to the companies affiliated within the exchange system. This type of foreclosure is only possible if the information concerned is very strategic for competition and covers a significant part of the relevant market.”

3. Different forms of information sharing

19. The exchange of information between competing companies may take various forms. The following paragraphs will briefly discuss some of the most common ways for companies to establish flows of information. As for other ways of communicating, the form rarely has a bearing on the key question in this area, i.e., whether there is any restriction of competition or whether, on the contrary, the increased transparency does indeed generate efficiencies to balance the restrictive effects of cooperation.

3.1 Direct exchanges and vertical exchanges

20. Direct exchanges between competitors is the most obvious way of exchanging information and data. Absent acceptable justifications, competition agencies have taken the view that direct exchanges of sensitive information can rarely disguise the anticompetitive object of such agreements. However, information sharing can fall within the scope of competition law even if there is no direct exchange between competitors. Pricing rules in vertical agreements could bear contingency clauses or commitment obligations like most favoured nation, meeting competition or price matching clauses, or resale price

37 See Bennett and Collins, 2010.
38 See para 65.
40 Under a most favoured nation (‘MFN’) clause, the buyer is guaranteed the lowest price offered by the seller to other buyers. In general, MFN clauses are viewed as a protection of the weaker contractual party (i.e., the buyer) who will be sheltered from future price shocks and/or from discriminatory treatment vis-à-vis other buyers (see Motta, 2004; Capobianco, 2007). However, the chilling effect of these type of clauses on price competition is apparent: if these clauses are widely used in an industry, no supplier will have any incentive to adopt aggressive price cuts (e.g. to attract new customers), because the price cut will affect all its customers, with great loss of profits. Therefore deviations from a collusive outcome will be more unlikely.

41 Under a meeting competition clause, the buyer is guaranteed the lowest price offered by the seller’s rivals (also known as an ‘alignment clause’). These clauses, by increasing the transparency of the market (i.e., because the buyer will have to inform the supplier of the competing price) may facilitate horizontal
maintenance clauses, which allow the supplier to know immediately if rivals have undercut its price. These clauses therefore increase the chances of detecting deviations. Similar concerns are raised by the so-called ‘English clause’, whereby customers have an obligation to disclose to the dominant company the existence of competing offers and have to inform the dominant company of the terms and conditions of such offers. The dominant company has then a right to match the competing offer; thus, it is able to use the information from its own customers (which it would not have otherwise) to adapt its market strategy vis-à-vis its customers and competitors. In practice, English clauses create an artificial market transparency providing the dominant firm with information about the market and the actions of its competitors, which may have a great value for carrying out its market strategy.

21. Competition agencies have investigated cases of vertical information flows (so-called “hub-and-spoke” arrangements), where the exchange of commercially sensitive information takes place through a third party, for example from one retailer to another via their common supplier. Vertical exchanges of information between manufacturers and retailers are normally not objectionable if the information transferred concerns only the retail sales of the manufacturer in question. Vertical exchanges, however, may amount to a competition infringement if they allow for the identification of sales of other competitors, and if such information allows interference with the retail activity of the dealers or of the parallel importers. In these cases, while the flow of information is vertical in nature, as it involves firms on different levels of trade, the effect of the exchange is horizontal as it affects competition between retailers or between suppliers.

**Box 4. Examples of "hub and spoke" cases from the United Kingdom**

In the United Kingdom, the Office of Fair Trading (the ‘OFT’) has investigated a number of vertical information exchange cases.

In *Double Glazing*, the OFT found that the UK’s leading supplier of a chemical used in double glazing had conspired with four of its double glazing distributors to fix and/or maintain minimum resale prices for UOP’s chemical. According to the OFT investigation, the conspiracy originated by the decision of UOP to resolve a dispute among its distributors who had complained about a too-aggressive pricing policy by their competitors. The OFT showed that each distributor could have reasonably expected that other distributors would have ceased the price war following the manufacturer’s intervention. The distributors were aware of each others’ involvement and knew their conduct was part of an overall strategy.

In the *Replica Football Kit* case, the initiative to organise the conspiracy came from the retailers, rather than the manufacturers. The investigation unearthed evidence of several agreements or concerted practices to set a minimum price. In practice, meeting competition clauses work as an information exchange mechanism and therefore allow firms to immediately detect price deviations, since customers will immediately report them to benefit from the lower price.

42 In vertical agreements where the buyer is obliged or induced not to resell below a certain price (so-called minimum resale price maintenance), at a certain price (so-called recommended resale price maintenance) or not above a certain price (so-called maximum resale price maintenance), competition may be affected if these pricing clauses increase firms’ awareness of competitors’ prices. Increased price transparency makes horizontal collusion among suppliers or among distributors easier, at least in concentrated markets.

43 In the *Hoffmann-La Röche* judgment (in [1979] ECR 461), the GJEU concluded that “the fact that an undertaking in a dominant position requires its customers or obtains their agreement under contract to notify it of its competitor’s offers, whilst the said customers may have an obvious commercial interest in not disclosing them, is of such a kind as to aggravate the exploitation of the dominant position in an abusive way” (para 106).

44 OFT decision of 8 November 2004 (CA 98/08/2004).

45 OFT decision of 1 August 2003 (CA98/06/2003).
price for certain football replica kits, including top-selling shirts. The agreements were policed through informal meetings and monitoring retail customers. Indirect contacts between competing retailers had occurred via a mutual supplier and the OFT held both the manufacturer and the retailers liable for a concerted practice aimed at co-ordinated prices. The challenged conduct originated from pressures exercised over the manufacturer (Umbro) by a retailer (JJB). JJB threatened to cancel orders because of a competing retailer’s aggressive discounting practices. Umbro intervened to compel a price raise, to encourage price-fixing agreements between retailers and to facilitate price collusion between retailers by exchanging retail pricing information.

A similar trilateral arrangement was investigated by the OFT in the *Toys and Games* case. Here the OFT found that two retailers and the manufacturer Hasbro had entered into unlawful price-fixing agreements regarding the sale of toys and games. The Competition Appeal Tribunal when assessing the OFT’s decision found that Hasbro had entered into separate bilateral agreements with each of the retailers, whereby each of them had agreed to sell certain of Hasbro’s toys and games at Hasbro’s recommended retail prices. Furthermore, as Hasbro had disclosed the pricing intentions of one retailer to the other, there was a trilateral agreement between Hasbro and the two retailers.

According to the case law of English courts which reviewed the OFT decisions, proving the knowledge of the parties and the context of the exchange is crucial. It must be demonstrated that where a retailer discloses to their supplier their future pricing intentions, the circumstances of this disclosure are such that the retailer may be taken to have intended that the supplier will/would make use of that information to influence market conditions, or did in fact foresee this, by passing that information on to other retailers. The OFT must show that the information has actually been passed on and that it is used by the recipient to determining its own future pricing strategy.

### 3.2 Exchanges through trade/industry associations

22. In many cases, trade and industry associations provide the ideal context for firms to exchange information. The fact that there is no direct contact between competitors but that communications are managed by a trade association does not necessarily change the assessment of the practice under competition rules. Because the institutional (and legitimate) role of trade associations is that of collecting and disseminating information on the relevant industry sector among the members, it is particularly important to distinguish those cases where the dissemination underlies a conspiracy between the members, from those cases where the activity of the trade association renders the market more efficient, making both competitors and consumers better off. In order to avoid the risk of violating competition law trade associations should put in place extra safeguards against anticompetitive spill-overs from their institutional tasks. For instance, associations should - if possible - make the collected information available to non-members; ensure participation in the statistical programs is voluntary and open to non-members; verify that the trade association does not become the forum for further discussions between members about the data disseminated and its bearing on commercial strategies; and ensure management of the trade association is independent from the members of the association.

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48. See Bennett and Collins, 2010.

49. In the *UK Agricultural Tractor Exchange* decision (in [1992] OJ L 68/19), the European Commission also questioned the validity of a vertical exchange of information between manufacturers and retailers. In particular, the Commission established that such an exchange is not objectionable if the information transferred concerns only the retail sales of the manufacturer in question, but may amount to an infringement of Article 101 TFEU if (i) it allows for the identification of sales of competitors and (ii) such information allows interference with the retail activity of the dealers or of the parallel importers.

3.3 Dissemination of market data by independent third parties

23. In many instances, information on the structure of the market is disseminated by an independent consultant (e.g., Nielsen, Dataquest, IDC, etc.) whose activity is to monitor markets and collect, compile and sell industry data and market studies to the market players. These market studies, often commissioned by individual firms, are largely based on publicly available information and/or on the proprietary intelligence of the consultant companies and/or on data gathering at retail level. Despite the fact that the market studies are a means to disseminate sometimes very sensitive information, competition agencies are more reluctant to challenge such activities. There are several reasons why.

- First, in these cases there is no real exchange of information between competitors, since information is independently collected by the consulting company from the market and not directly from the suppliers. Thus, one of the conditions for the application of cartel rules (i.e., the existence of an agreement between competitors) is not met.51

- Second, the information used for these market studies is usually publicly available; if the market is in itself transparent, the exchange of information does not add any risk of collusion to that market.

- Third, using specialized consultants for gathering market intelligence allows cost savings which increase the company’s business efficiency.

24. If, on the other hand, the market study prepared by the independent consultant is jointly commissioned by the market players (i.e., there is an agreement between competitors to give a joint mandate to the consultant) and the information is provided by the companies to the consultant, the consultant could play a similar role to that of a trade association, and exposure to antitrust enforcement could be higher.

3.4 Public information exchanges and private information exchanges

25. A distinction can be drawn between public market transparency and private market transparency. Public exchanges of information lead to market transparency for the benefit of all market players, including consumers; private exchanges only increase transparency on the supply side. It has been argued that public transparency intensifies competition, while private transparency is likely to restrict it.52 An information exchange is genuinely public if it makes the exchanged data equally accessible to suppliers and customers. The fact that information is exchanged in public may decrease the likelihood of a collusive outcome on the market to the extent that competitors unaffiliated to the information exchange, potential entrants, and buyers may be able to constrain any potential restrictive effect on competition.

26. Empirical evidence shows that the positive effects for consumers of public announcements outweigh the possible collusive effects from the transparency they generate.53 Because of this, it can be very difficult in practice to distinguish whether public information exchanges have a pro-competitive effect

53 See Motta, 2004. Public announcements have a smaller risk of under-enforcement (see Bennett and Collins, 2010). For this reason, their effects on competition should be analysed on a case-by-case basis. As for private exchanges, while they should not be viewed as presumptively anti-competitive in all circumstances, most agencies are very cautious and looked at very closely to assess if there is any benefit/efficiency that can justify them under the competition rules.
or simply facilitate collusion. One important factor that the literature points out is that communications
between firms may have little value in facilitating coordination unless the information is verifiable.
Information which is not verifiable can be dismissed as “cheap talk” and therefore disregarded.54 However,
some have suggested that “cheap talk” can assist in a meeting of minds and allow firms to reach an
understanding on acceptable collusive strategies.55 Even “cheap talk” which is not immediately verifiable
may be of concern as announced plans can often be verified later or revoked, and wrong announcements
can be punished, which in long-term commercial relationships, may be enough to create credibility.56 This
is the position that was taken by the US Department of Justice in the ATP case,57 which involved “cheap
talk” such as announcing a future price increase but leaving open the option to rescind or revise it before it
took effect. The Department argued that if the terms of agreement are complex but there is a common
desire to reach agreement, cheap talk can help firms reach a collusive equilibrium.58

3.5 Information exchanges and unilateral announcements

27. Although direct exchange of data between competing companies is clearly the most
straightforward example of information sharing, more subtle forms of exchange may also be anti-
competitive. Courts have always been reluctant to condemn unilateral public announcements of future
prices as anticompetitive because of the potential benefits to consumers in comparing prices and adjusting
their purchasing strategies. This is consistent with the economic theory that public disclosures of sensitive
information make demand more elastic and therefore reduce the likelihood of coordination on the supply
side.59

28. The CJEU, for example, in Wood Pulp60 stated that if prices are announced to the public, “[t]hey
constitute in themselves market behavior which does not lessen each undertaking’s uncertainty as to the
future attitude of its competitors. At the time when each undertaking engages in such behavior, it cannot be
sure of the future conduct of the others”61. The Court concluded that the system of price announcements
represented a rational response to the fact that both buyers and sellers needed the information in advance in
order to limit their commercial risk in a long-term market.

29. However, information which is made available through public price announcements may act as
indirect exchanges of information, or as a ‘signal’ to competitors of a company’s future intentions. This
behaviour may offer competitors opportunities to align prices. For this reason, competition agencies have
considered the potential application of competition rules also in relation to information exchange by means
of publishing data, e.g., on a common website accessible to a group of competitors, or by reacting publicly
to announcements of other competitors regarding strategic issues. Agencies have attempted to develop
rules to distinguish between price announcements with positive effects and those with collusive potential.

54 See Baliga and Morris, 2002.
55 See Overgaard and Møllgaard, 2007.
57 See discussion below.
59 According to Kühn , public pricing announcements enclose forms of commitment relative to customers
which trigger potential efficiency effects significant enough not to consider the public announcement as a
violation of competition rules (see Kühn, 2001).
61 See para. 64.
30. In the *Airline Tariff Publishing (ATP)* case, the US Department of Justice was determined to pursue a case of price posting on a jointly-owned fare exchange system, in a way that facilitated collusion. ATP was a joint venture created by eight major US airlines which collected fare information from the airlines and disseminated it on a daily basis to all airlines and the major computer reservation systems used by travel agents. The US Department of Justice alleged that the ATP system allowed air carriers to respond quickly to each others’ prices and made the deterrence more imminent which in itself facilitated collusion. In addition, ATP could serve to coordinate future actions to eliminate strategic uncertainty. It allowed air carriers to engage in “cheap talk”, i.e., to engage in communication that did not commit the carriers to a particular course of action but rather allowed them to “negotiate” without the need to meet in order to coordinate on the collusive outcome. The ATP case was settled through consent decrees in 1994.63

4. Information exchanges in the practice of selected jurisdictions

4.1 European Union

31. Article 101 TFEU, which prohibits agreements and concerted practices between competitors whose object or effect is to restrict competition within the common market, does not refer to the exchange of information among the non-exhaustive list of anti-competitive practices included in its first paragraph. The current law on information exchange therefore originates from the European Commission’s enforcement practice and from the case law of the European courts.

32. The first policy statement of the European Commission on exchanges of information between competitors can be traced back to the 1968 Notice concerning Agreements, Decisions and Concerted Practices in the field of Co-operation between Enterprises (the ‘Notice’).64 The Notice established for the first time that exchanges of information may fall within the scope of application of what was then Article 85 EC (now 101 TFEU), but recognized that the assessment of such practice may vary according to the structure and characteristics of the industry and the specific facts of the case. The Notice already pointed out some of the factors that may influence such assessment including: (i) only the exchange of information which may have a bearing on competition is relevant under the Treaty rules on competition; and (ii) a restraint of competition may occur in particular on an oligopolistic market for homogeneous products.

33. The European Commission further detailed its policy on information exchanges in 1977,65 after a series of decisions on individual cases66 and along the lines of the judgment of the European courts in the

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62 More specifically, ATP designed and operated the system in a way that unnecessarily facilitated coordinated interaction among the airlines so that they could (1) communicate more effectively with one another about future fare increases, restrictions, and elimination of discounted fares, (2) establish links between proposed fare changes in one or more city-pair markets and proposed changes in other city-pair markets, (3) monitor each other’s changes, including changes in fares not available for sale, and (4) reduce uncertainty about each other’s pricing intentions.


64 In [1968] OJ C075, p. 3. The 1968 Notice was replaced in 2001 by the Commission’s Guidelines on the applicability of Article 81 to horizontal co-operation agreements (see OJ C 3 of 06.01.2001, p. 2), which expressly do not cover agreements between competitors on the exchange of information (see paragraph 10). However, it is widely understood that the policy statements in the Notice are still correct today.

65 See 7th Report on Competition Policy, at para. 5 et seq.

Sugar case.\textsuperscript{67} In particular, the European Commission reaffirmed its policy statement that there is no per se approach to information exchanges, but that a case-by-case approach is fundamental for the assessment of whether an information sharing system is restrictive of competition. In addition, in its 1977 policy statement, the European Commission listed three key criteria it follows when reviewing such arrangements. First, the structure of the market is likely to affect the probability that these sorts of contacts might generate incentives to coordinate commercial behaviour between competitors.\textsuperscript{68} Second, the nature and the scope of the information exchanged both have an important bearing on the likelihood that the information can indeed be used by the recipient to coordinate market strategies rather than to compete more fiercely.\textsuperscript{69} Third, the European Commission also takes into account whether the exchange of information is of a private nature - this form of cooperation between firms normally improves only the seller’s knowledge of the market - or has a wider public impact on the customers as well, who will therefore be in a position to compare the various offers and increase the level of competition.

34. Although the European Commission’s first policy statement on this issue dates back to 1968, it was only in the early ‘90s with the \textit{UK Agricultural Tractor Exchange} case\textsuperscript{70} that the European Commission had a case in which it carried out a comprehensive assessment of the potential restrictive effects of a stand-alone information exchange system. The European Commission’s decision was reviewed in appeal by both the General Court (the ‘GC’, then Court of First Instance)\textsuperscript{71} and by the CJEU (then European Court of Justice).\textsuperscript{72} Both courts rejected the appeals and fully endorsed the European Commission’s approach.

\textsuperscript{67} See CJEU, Joined Cases 40/73 to 48/73, 50/73, 54/73 to 56/73, 111/73, 113/73 and 114/73, \textit{Suiker Unie and others vs. Commission}, [1975] ECR 1663.

\textsuperscript{68} The increased transparency generated by the exchange of information strengthens the interdependence between firms and reduces the intensity of competition in oligopolistic markets, insofar as the increased knowledge of the market (\textit{i.e.}, transparency) allows participants to monitor competitors’ strategies and to swiftly (and efficiently) react to one another’s action.

\textsuperscript{69} While the European Commission will closely scrutinize the exchange of sensitive information and of trade secrets \textit{(i.e.}, quantities produced and sold, prices, terms for discounts, general terms of sale, delivery and payment, etc.), it will not object to the exchange of statistical data which sets out production and sales figures without identifying individual businesses and without breaking down the data by product, country or period of time beyond what is required for the statistical purposes.


Box 5. The UK Agricultural Tractor Registration Exchange case

In Europe, the leading case on the exchange of information between competitors remains the UK Agricultural Tractor Registration Exchange case. The 1992 decision of the European Commission, which largely reflected its earlier policy statements, found that a complex system for the exchange of information between tractor manufacturers in the UK infringed the European competition rules. The decision was then subject to separate appeals, first to the GC and later to the CJEU. Both courts upheld the Commission’s decision, confirming the analysis and the conclusions.

The European Commission based its infringement decision on four main findings:

- The highly concentrated nature of the market, which also had significant barriers to entry and was protected from competition by imports from outside the Community.
- The confidential nature of the information exchanged.
- The extremely detailed level of the information exchanged, in terms of product and geographic breakdowns, and time periods taken into account, which created an even higher degree of transparency in an already highly concentrated market.
- The fact that the participants to the exchange system met regularly within an industry association giving them a forum for contacts.

The Commission concluded that a detailed exchange of sensitive information in a market which is highly concentrated and not exposed to external competitive pressure increases the likelihood of collusive outcomes on the market. Two anticompetitive effects were identified by the decision. First, the increased level of transparency in a already highly concentrated market would prevent the residual hidden competition (or the ‘surprise effect’) between the participants to the exchange of information, who would be less exposed to the aggressive reaction of the other market players (i.e., restriction of internal competition between members of the exchange system). In concentrated markets, secrecy and uncertainty are the key factors to residual competition. Second, the exchange of information raises barriers to entry for non-members of the exchange system (i.e., restriction of external competition), regardless of whether they join the exchange system or not. If a new supplier chooses not to become a member of the exchange, he would be disadvantaged by the fact that he did not have access to the detailed and accurate market information about other suppliers which is available to members of the exchange. If, on the contrary, it chooses to become a member of the exchange, it would be forced to reveal to its competitors its own confidential data on a very detailed level, thus permitting the incumbent suppliers to use such information to prevent aggressive market strategies by the new member.

Following the UK Agricultural Tractor Exchange case, the European Commission applied on various occasions the principles established in the decision, further clarifying their scope. In particular, the UK Agricultural Tractor Exchange decision triggered a number of notifications of information exchange systems seeking individual exemption under Article 101(3) TFEU. Some of examples are discussed below.

In the 1994 Cartonboard decision, the European Commission ordered the parties to cease the exchange of commercial information on deliveries, prices, plant standstills, order backlogs and machine utilization rates in support of other restrictions of Article 101 TFEU, even if exchanged in the form of aggregated statistics. The GC annulled the part of the European Commission’s decision relating to the

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73. The Commission rejected the parties’ request for an individual exemption of the agreements setting up the exchange, since it concluded that the exchange system did not meet the conditions for such an exemption set forth in Article 81(3) EC, now article 101(3) TFEU.

exchange of statistical data which, according to the court, could not be used for anti-competitive purposes since such statistical information could not be used to deduce information about individual companies.\textsuperscript{75} In \textit{CEPI-Cartonboard},\textsuperscript{76} the Commission reviewed the application for negative clearance of a new exchange system between cartonboard producers which was meant to replace the information exchange system censored by the Commission in 1994. The modified system would allow the association to continue collating and disseminating important statistical information to its members, in conformity with EU competition rules. Despite the fact that the notified agreement only provided for an exchange of statistical information (i.e., no disclosure of individual data) without side discussions of these statistics and disclosure of sensitive information (i.e., prices, production forecasts or forecasts of capacity utilization rate), the European Commission insisted on modifying the notified systems because it allowed in particular cases the parties to identify individual participants from the analysis of the aggregated data.\textsuperscript{77}

37. In the \textit{Wirtschaftsvereinigung Stahl} decision,\textsuperscript{78} the European Commission found that an exchange of confidential information at firm level (i.e., individual market shares and data on individual deliveries, broken down by quality and consumer industries) on a monthly basis infringed EU competition law.\textsuperscript{79} The outcome of the decision heavily relied on the concentrated nature of the steel industry in Germany, and on the existence of structural links between the participants. The Commission also concluded that exchanging information on deliveries allowed competitors to identify those undertakings which tried to increase their market share and to undertake retaliatory measures against them, therefore eliminating incentives to effective competition.

38. In 1998, the European Commission exempted by comfort letter an agreement between the members of \textit{EUDIM}, an association of wholesalers in installation materials, whose purpose was - \textit{inter alia} - to exchange confidential information on a number of products sold to the members of the association. In its notification,\textsuperscript{80} EUDIM argued that the information exchange system was not restrictive of competition because, by exchanging information related to individual purchase prices and conditions, its members were seeking to strengthen their bargaining power \textit{vis-à-vis} their suppliers, by trying to obtain the best (lowest) purchase prices. According to EUDIM, the purpose of the exchange of purchase prices was to reduce costs, which would have allowed its members to compete more effectively with other wholesalers who had lower costs, such as do-it-yourself stores. The European Commission shared EUDIM’s views and considered that the information exchanged, whether of a general nature or of an individual character (such as specific purchase prices and supplier rebates), did not restrict competition on the relevant wholesale market.

\textsuperscript{75} See GC, \textit{Sarrió SA vs. Commission}, [1998] ECR II-01439, at para. 281. The GC added that “the mere fact that a system for the exchange of statistical information might be used for anti-competitive purposes does not make it contrary to Article 85(1) [now 101(1)] of the Treaty, since in such circumstances it is necessary to establish its actual anti-competitive effect”

\textsuperscript{76} See Commission’s Notice pursuant to Article 19.3 of the Regulation 17 (case no. IV/34.936/E1 - \textit{CEPI-Cartonboard}), in [1996] OJ C 310/3.

\textsuperscript{77} This was, for instance, the case of countries where only two competitors were part of the exchange of information. In particular, the Commission requested that, when only two or very few manufacturers were present on a certain geographic or product market, the data be aggregated with those of other countries and/or with other products in the same country.


\textsuperscript{79} The case fell under the scope of application of Article 65 ECSC, since the participants to the agreement operated in the steel industry.

\textsuperscript{80} A description of the notified agreements can be found in the Commission’s Notice pursuant to Article 19.3 of the Regulation 17 (case no. IV/33.815, 35.842 - \textit{EUDIM}), in [1996] OJ C 111/8.
39. More recently, the European courts have looked at information exchange in two instances. In the Asnef/Equifax case, the CJEU looked at an exchange of information set up by Asnef, the Spanish association of financial institutions. In particular, Asnef had set up an online register containing sensitive information on existing and potential borrowers (e.g., past credit history, failures to pay, outstanding credit balances etc.) to better inform lenders as to risks connected with granting loans leading to greater and more efficient availability of credit. As the credit register was designed to limit risk of credit institutions in granting loans, the Court found that such exchange did not, in principle, have as its object to restrict competition. To reach such conclusion, the CJEU looked at the context of the agreement, the relevant markets and at the specific characteristics of the system concerned (such as its purpose, conditions of access to it, the type of information exchanged, the periodicity of such information and its importance for the fixing of prices, volumes or conditions of services) and concluded that the exchange of information did not have by its very nature the object of restricting or distorting competition.

40. In T-Mobile Netherlands, its most recent judgement in this area, the CJEU took a strict view on information exchanges. The case involved a single meeting of the five operators of mobile telecommunication services in the Netherlands where the parties discussed, among other things, reducing standard dealer remunerations for post-paid subscriptions. The Court hold that “[…] an exchange of information which is capable of removing uncertainties between participants as regards the timing, extent and details of the modifications to be adopted by the undertaking concerned must be regarded as pursuing an anti-competitive object, […]” The Court also confirmed that even a limited exchange of information between competitors, concerning matters other than prices to customers and in the context of a single meeting, can infringe the competition rules.

41. In response to the recent court pronouncements and in order to provide guidance in this area of law, in May 2010 the European Commission published for consultation a revised version of the Guidelines on the application of Article 101 TFEU to horizontal cooperation agreements between competitors. The Draft Guidelines, reflecting both EU case law and the European Commission’s practice in this area for the first time offers general guidance on when exchanges of information between competing companies might breach the EU competition rules. In the Draft Guidelines, it is said that information exchanges can have restrictive effects on competition if they lead to co-ordination of competitive behaviour, or to market foreclosure. In most cases, the assessment of information sharing will depends on the characteristics of the market (concentration, transparency, stability and complexity), on the market coverage and on the type of information exchanged (commercial sensitivity, public availability). As for exchanges of future conduct on prices or quantities the Draft Guidelines states that they often infringe Article 101 TFEU “by object”. The Commission will also look information exchanges under Article 101(3) and justify them if they lead to intensification of competition or significant efficiency gains.

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82 The Court concluded that the risk of lending is reduced by reducing the disparity between the information available to credit institutions and that held by potential borrowers.
83 See case C-8/08, T-Mobile Netherlands and others, judgement of 4 June 2009.
85 Further guidance on the European Commission’s approach to information exchanges in specific industry sectors can be found in the Communication on the Application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of agreements, decision and concerted practices in the insurance sector (in [2010] OJ C 82/20) and in the Guidelines on the Application of Article 81 of the EC Treaty to maritime transport services (in [2008] OJ C 245/2).
4.2 United States

42. In the United States, Section I of the Sherman Act of 1890,\(^{86}\) states that “[e]very contract, combination […], or conspiracy, in restraint of trade or commerce […], is declared to be illegal.”. As in the European Union, US antitrust statutes do not prohibit, or even disfavour, information exchanges. Courts and the enforcement agencies have recognised the potential pro-competitive benefits of certain information exchange programmes. Nevertheless, agencies and courts have identified instances where exchanges of information can be a facilitating factor for collusion and therefore should be prohibited. A number of early decisions from US courts have established the line between permissible and impermissible exchanges of price information.

43. In its earlier judgements, which primarily dealt with exchange of information between members of trade associations, the Supreme Court was mostly concerned with the exchange of price and output information; particularly, when the exchange included “suggestions as to both future prices and production”.\(^{87}\) The Court held that the exchange of this type of information intended to reduce production and raise prices.\(^{88}\) The Court also focused its attention on the private nature of the information sharing schemes, noting that if the information is kept within the association membership, it prevents the members’ customers using it to negotiate on a more favourable basis with association members.\(^{89}\) Public exchanges of information, on the contrary, can be beneficial for competition if the information is disseminated in the widest possible way (i.e., the information is available not only to the association’s members, but also to their customers) and in aggregated form, even if the exchange calls for detailed information on individual sales, prices and monthly information on production and new orders.\(^{90}\)

44. In more recent cases, the Court focussed its analysis on the actual effects of the information exchange on competition and recognised the importance for this analysis of factors such as the degree of market concentration, the nature of the product and the characteristics of demand. The Court also concluded that reciprocal exchanges of price information could amount to a concerted action sufficient to establish an anti-competitive conspiracy under Section 1 of the Sherman Act.\(^{91}\) It also ruled out a per se

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\(^{87}\) See American Column and Lumber Co v. US, 257 US 377 (1921, at 398-99.

\(^{88}\) The judgement was criticised for not having taken into account the pro-competitive effects of the exchange of information. Justice Brandeis and Justice Holmes dissented and saw no evidence of any serious attempt to limit production, and found that there was simply a reporting of “market facts”. The dissenting judges concluded that not allowing the exchange of information could lead to the elimination of competition in the wood industry.

\(^{89}\) See US v. American Linseed Oil Co, 262 US 371 (1923), where the Court struck down another associational information exchange programme concerning price lists, price variations and the names and addresses of buyers who received special prices.

\(^{90}\) See Maple Flooring Manufacturers Association v. US, 268 US 563 (1925).

\(^{91}\) In US v. Container Corporation of America et al. (393 US 333 (1969)), for example, the Court found that an agreement between container manufacturers to exchange information with no evidence of intent to adhere to a price fixing scheme was anti-competitive. Individual orders of cardboard boxes were customised according to the customer's needs, and prices were quoted individually to prospective buyers. The product was fungible, demand was inelastic, and competition was based on price. Each participant, upon request by a competitor, would offer information as to the most recent price charged or quoted to individual customers, with the expectation of reciprocity and with the understanding that it represented the price currently being bid. The defendants accounted for about 90% of the relevant market and the exchange of price information was infrequent and irregular. However, the exchange of price information stabilized prices at a downward level.
approach to the assessment of information exchanges in favour of a rule of reason approach. The Court argued that the pro or anti-competitive effects of these practices depend on a variety of factors and that they have to be assessed necessarily on a case-by-case basis.  

45. In April 2000, the U.S. Federal Trade Commission and the U.S. Department of Justice (the ‘DOJ’) issued the Antitrust Guidelines for Collaborations among Competitors. Drawing from the extensive guidance from the courts, the Guidelines recognize that the sharing of information among competitors may be pro-competitive and is often reasonably necessary to achieve the pro-competitive benefits of certain collaborations; for example, sharing certain technology, know-how, or other intellectual property may be essential to achieve the pro-competitive benefits of an R&D collaboration. Nevertheless, the US agencies identify instances where the sharing of information related to a market in which the collaboration operates or in which the participants are actual or potential competitors may increase the likelihood of collusion on matters such as price, output, or other competitively sensitive variables. The competitive concern depends on the nature of the information shared. All things being equal:

- The sharing of information relating to price, output, costs, or strategic planning is more likely to raise competitive concern than the sharing of information relating to less competitively sensitive variables.
- The sharing of information on current operating and future business plans is more likely to raise concerns than the sharing of historical information.
- The sharing of individual company data is more likely to raise concern than the sharing of aggregated data that does not permit recipients to identify individual firm data.

46. In general, the Guidelines also exclude that the two agencies under normal circumstances would challenge a competitors collaboration when the market shares for the collaboration and its participants collectively account for no more than 20% of each relevant market.

47. The Guidelines complement the 1996 guidance jointly issued by the two agencies on information exchange programs in the context of the health care industry. To help protect against the risk of collusion, the joint statement identifies antitrust “safety zones” where the agencies will not challenge information sharing arrangements on prices, discounts or methods of payment. The safe harbours apply provided that:

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92 In *US v. United States Gypsum Co. et al.*, 438 US 422 (1978), the Court reviewed the exchange of information between several manufacturers of gypsum board concerning the current prices charged to specific customers. The defendants alleged that the purpose of the practice was to ensure that any price cut offered was necessary to meet a competitive price. The Court held that “the exchange of price data and other information among competitors does not invariably have anticompetitive effects; indeed such practices can in certain circumstances increase economic efficiency and render markets more, rather than less, competitive. For this reason, we have held that such exchanges of information do not constitute a per se violation of the Sherman Act. [...]. A number of factors including most prominently the structure of the industry involved and the nature of the information exchanged are generally considered in divining the procompetitive or anticompetitive effects of this type of interseller communication. [...] Exchanges of current price information, of course, have the greatest potential for generating anticompetitive effects and although not per se unlawful have consistently been held to violate the Sherman Act. [...]” (at 441, n. 16).


94 See section 3.31(b).

• the survey of prices or salaries is managed by a third party (e.g. a purchaser, government agency, health care consultant, academic institution, or trade association);

• the information provided by survey participants is based on data more than three months old; and

• there are at least five providers reporting data upon which each disseminated statistic is based, no individual provider’s data represents more than 25% on a weighted basis of that statistic, and any information disseminated is sufficiently aggregated that it would not allow recipients to identify the prices charged or compensation paid by any particular provider.

4.3 Canada

48. In December 2009, the Canadian Bureau of Competition released a set of guidelines on competitors collaboration.96 Part of the Guidelines is dedicated to information sharing among competitors, both through direct exchanges and through trade associations.97 The Guidelines recognise that, for the most part, such exchanges do not raise concerns under the Act because competitors generally avoid sharing information that is competitively sensitive in order to preserve their competitive advantage. In certain cases, an agreement that involves a unilateral disclosure or exchange of information between competitors can impair competition by reducing uncertainties regarding competitors’ strategies and diminishing each firm’s commercial independence.

49. In assessing information sharing agreements between competitors, the Bureau will consider a number of factors:

• The nature of the information exchanged, i.e., whether the information is competitively sensitive).98 An agreement to disclose or exchange information that is important to competitive rivalry between the parties can result in a substantial lessening or prevention of competition. This is the case, for example, of price information, information on costs, trading terms, strategic plans, marketing strategies or other significant competitive variables. Where competitors agree to share competitively sensitive information, it can become easier for these firms to act in concert, thereby reducing or even eliminating competitive rivalry. In general, the Bureau does not consider publicly available information to be competitively sensitive, but may be concerned with an agreement between competitors to disclose future pricing information if such an agreement has anticompetitive effects and there is an efficiency justification for it.

• The timing of the information exchange (e.g., whether the information relates to historical, current or future activities).99 The exchange of information relating to current or future activities is more likely to affect competition adversely and, as such, raises greater concerns than the exchange of information relating to historical activities. However, an agreement to disclose historical information could still raise concerns if the information provides a meaningful indication of future intended pricing or other competitively significant factors.

• Whether the parties participating in the information exchange have market power or will likely have market power.100 The Bureau will not challenge agreements to share information unless the

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96 Available on the website of the Canadian Competition Bureau.
97 See Section 3.7.
98 See Section 3.7.1.
99 See Section 3.7.2.
100 See Section 3.7.3.
parties have or are likely to have market power, or the relevant market is concentrated such that firms are able to engage in a coordinated exercise of market power.

- **The manner in which the information is collected and disseminated** (e.g., whether the information is shared directly between competitors or aggregated by a third party). Information exchanged directly between competitors is more likely to raise concerns than information that is supplied to an independent third party. In addition, information that is aggregated so as not to disclose information specific to any given firm is less likely to raise concerns than information that is shared in a disaggregated form.

- Whether any anti-competitive effects are offset and outweighed by the efficiencies generated through the information sharing agreement. The Canadian Guidelines also deal with whether any efficiencies generated through the sharing of information between competitors outweigh the anti-competitive effects thereof. The guidelines specifically state that there are various types of efficiency which may come to fruition from such information exchanges, such as the reductions in fixed and variable costs owing to rationalization of distribution, sales and advertising functions; improved utilization of distribution and warehousing; increased specialization in distribution, sales and marketing functions; more intensive use of a network infrastructure; and improvements to product quality.

### 4.4 Japan

50. The Japanese Fair Trade Commission (the ‘JFTC’) published Guidelines concerning the activities of trade associations under the Antimonopoly Act (the ‘AMA’) in October 1995. Although the Guidelines expressly review the possible effects on competition of trade associations’ activities, the detailed discussion of the JFTC assessment of information sharing schemes within a trade association can apply even outside the context of a trade association.

51. According to Section 9 of the Guidelines, some exchanges are likely to constitute an infringement of the AMA. In particular, the JFTC finds that tacit collusion can be facilitated by the exchange of information specifically related to important competitive factors, concerning the present or future business activities of the firms involved, such as specific plans or prospects regarding the prices or quantities of goods or services supplied or received; specific details of the transactions with customers; and the limits of anticipated plant investment.

52. In contrast, the exchange of other types of information is unlikely to constitute a violation of the AMA. This includes information on the proper use of products for the benefits of consumers, general information on technological trends, management expertise, market environment, legislative or administrative trends, historical information on firms’ business activities, statistical information, information on materials or technology indicators that enable fair and objective benchmarking, general information on the overall demand trends, and information concerning the credit standings of customers for the purpose of ensuring safe transactions.

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101 See Section 3.7.3.

102 In evaluating an agreement to exchange information, the Bureau will also consider the safeguards established through the organization and governance of the collaboration that are directed at preventing or minimizing the disclosure of competitively sensitive information. For example, participants in the collaboration can limit disclosure of information to personnel who are not engaged in sales or marketing activities, or can prevent sales and marketing personnel from participating in a research and development joint venture.

103 See Section 3.7.3.
4.5 Italy

53. In Italy, the Italian Competition Authority (the ‘AGCM’) has been confronted with a number of information exchange cases. In *RAS-Generali/IAMA Consulting*,\(^{104}\) for example, the AGCM investigated a concerted practice by insurance companies whereby all companies acquired access to the same database which included detailed information on life assurance and pension insurance products.\(^{105}\) The AGCM found that the acquisition of the database by the insurance companies amounted to a concerted practice to exchange horizontal sensitive information between them. The decision is interesting because the market structure was not very concentrated\(^{106}\) and because the information that was included in the database was public. The AGCM argued that even in non-oligopolistic markets an exchange of information may be restrictive of competition if it concerns prices and if consumers do not benefit from the greater transparency. As for the public nature of the information, the AGCM argued that (i) the information contained in the database was supplied by the insurance companies themselves, and was not independently collected from the market by the consultant; and that (ii) the information contained in the database had an added value in comparison with the information that individual insurance companies could collect directly from the market and from public sources.

54. The AGCM has also looked into vertical information exchange schemes. In the *Baby Milk* case,\(^{107}\) it held that indirect contacts between competitors were sufficient to presume collusion. The case saw milk production companies forwarding a list of suggested retail prices to pharmacies, which were then integrated in a database accessible to all pharmacists and to all milk producers as well. The authority was concerned that all producers offered similar rebates to pharmacies and wholesalers. In *Philip Morris/Cigarette Retailers*,\(^{108}\) the AGCM was also confronted with a situation where there was no direct exchange of information between competitors (i.e., no direct horizontal effects) as the exchange took place between companies at different levels of trade.\(^{109}\) Nevertheless, the AGCM concluded that the vertical

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\(^{104}\) See Bollettino 40/2004.

\(^{105}\) The database offered the buyer access to sensitive information on all insurance and pension products available on the Italian market. The information was disaggregated (i.e., available for each product separately) and was released to the buyer on a quarterly basis.

\(^{106}\) CR4: 56%; HHI: 1.000.

\(^{107}\) In Bollettino 40/2005.

\(^{108}\) In Bollettino 24/2004.

\(^{109}\) In February 2003, Philip Morris (PM) notified the AGCM of a standard agreement that PM intended to enter with a significant number of tobacco retailers. According to the agreement, retailers had to transmit to PM, on an exclusive basis, information on the sales volumes of their outlets, and notably information on (i) PM’s daily sales volumes by brand, (ii) the retailer’s daily aggregated sale volumes, and (iii) the daily sales of each cigarette brand sold by the retailer. PM was to receive such information monthly. The AGCM decided to open an investigation on the ground that PM would gain a competitive advantage vis-à-vis its competitors by foreclosing access to the same or a comparable set of detailed and sensitive information on the sale of cigarettes in Italy. It considered that PM’s initiative, which would give it detailed exclusive information on its competitors’ sales on a daily basis, might go beyond what was necessary for PM to monitor its own business trends. Indeed, the investigation showed that the retailers selected by PM represented the best statistical group for such an exercise because of their number, size, location and type of business. The exclusivity clause clearly prevented competitors from replicating a similarly representative set of retailers. In the course of the investigation, PM removed the exclusivity, thus eliminating the main vertical concern raised by the AGCM. At the same time, PM argued that the agreement had pro-competitive effects, in particular that it would generate distribution efficiencies, such as avoidance of the stock disruption which is the main factor driving demand towards competing brands.
information exchange could indirectly affect horizontal competition between cigarette suppliers since it concerned sensitive information relating to the market for the sale of cigarettes.110

4.6 South Africa

55. In South Africa, the Competition Commission has reviewed information exchange schemes in a number of industry sectors. In March 2006, for example, the Commission filed a complaint against the major processors of dairy products alleging that they had directly and indirectly fixed purchasing milk prices from producers through the exchange of price information.111 The information exchanges between the processors were followed by discussions on forthcoming price reductions and on their magnitudes, on strategic decisions of individual processors including communications on changes to pricing structures, on prices paid by different processors in different regions and on future price movements. The information exchanged included private, individualised, disaggregated and future price information between competitors. The Commission concluded that removal of the uncertainty about the rivals’ actions which is the essence of competition can itself limit competitive rivalry, especially in highly concentrated markets where the increased transparency enables firms to better predict or anticipate their rivals’ conduct. Other information exchange schemes have been investigated by the Competition Commission in other markets, including milling, fertilizers, steel and cement.112

5. Factors considered when assessing information sharing arrangements

56. The review of the main literature on communication between competitors and of the agencies’ practice on exchanges of information shows that agencies rely on a number of factors when deciding whether communications between competitors may constitute a restriction of competition. In particular, they look at: (i) the structure of the market on which the participants to the exchange are active; (ii) the type of product to which the information refers; and (iii) the type and quality of information exchanged. Although the agencies’ practice focuses its attention on these factors, there are other aspects which should be taken into consideration when determining if an exchange of information is likely to facilitate collusion on the market or not. For instance, there are markets whose intrinsic degree of transparency is already very high (e.g., markets where certain information has to be made publicly available by mandatory rules). In these cases, the exchange of information would normally not add any extra transparency and may therefore be neutral as to a collusive outcome.113

110 The agreement was amended by Philip Morris and the AGCM closed the investigation with a non-infringement decision.

111 See Tribunal Consent Order in the matter between the Commission and Lancewood Cheese. Tribunal Case No 103/CR/Dec06.

112 See cases discussed in das Nair and Mncube, 2009; Morphet and van Dijk, 2009. One of the reasons for the numerous cartels and exchange of information in South Africa is the high degree of regulation which is some cases explicitly allows such practices.

113 The European Commission’s Draft Guidelines on the applicability of Article 101 TFEU to horizontal cooperation agreements states: “The lower the pre-existing level of transparency in the market, the more value an information exchange may have in attaining a collusive outcome. However, an information exchange that contributes little to the transparency in a market is less likely to have appreciable negative effects than an information exchange that significantly increases transparency. Therefore it is the combination of both the pre-existing level of transparency and how the information exchange changes this level that will determine how likely the information will have negative appreciable effects.” (see para 74)
57. Indeed, there are markets where, regardless of the degree of transparency, collusion is difficult to sustain. This could be the case where companies have no incentive to collude because:  

- the cost structures of the involved companies, their market shares, their capacity levels, and/or their degree of vertical integration are asymmetric, all factors which reduce the overall incentives of firms to reach a degree of coordination;  
- innovation is a very important competing factor in the market and may allow one firm to gain major advantages over others;  
- supply and demand conditions are too volatile and unstable to make coordination likely;  
- there are companies which are not part of the exchange of information that could jeopardize the outcome of any expected coordination;  
- entry barriers are low, and potential entry has a disciplinary effect on the alleged coordination;  
- customers have sufficient countervailing buyer power to make coordination unstable;  
- retaliation is not likely to be successful, making incentives to deviate from any collusive arrangement very high.

58. All these factors should also be taken into consideration, as they may affect the assessment of an information exchange scheme.

5.1 The structure of the market and the nature of the product in question  

59. The fewer the firms on the market, the easier it is to collude. If a market is highly concentrated or there are only a few large firms on the supply side, the costs of organizing a sustainable collusion will be low; it will be easier to find terms of coordination and to monitor that those terms are actually respected by each participant; punishment mechanisms will be more effective since cheating firms will be exposed to much higher losses. In contrast, in fragmented markets, firms will have greater incentives to deviate from any collusive understanding in order to try and gain market shares over their competitors and monitoring such deviations will be much more difficult. Such incentives to deviate will jeopardize the stability of a cartel.

60. For this reason, competition agencies and courts have been particularly careful in reviewing exchanges of information in oligopolistic markets. In the UK Agricultural Tractor Registration Exchange case, for example, the European Commission prohibited the exchange of information in a market where four firms had combined market shares of almost 80% and with high barriers to entry. On the contrary, in the EUDIM case, the European Commission considered that the exchange of individual and confidential

114 For a discussion of these factors and their significance for collusion, see Ivaldi, Jullien, Rey, Seabright and Tirole, 2003.

115 Although pointing at a precise number may not always be the best way to proceed, there is empirical evidence that in markets with more than five competitors it is more advantageous to stay out of a cartel, while when there are less than five competitors they will all find it profitable to collude (see Selten, 1973).

information between the competitors would not have an appreciable effect on the competitive structure of the market, which was too fragmented (with more than 3,000 companies) to be considered oligopolistic.

<table>
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<tr>
<th>Box 6. Information exchange in non-oligopolistic markets</th>
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<td>The evidentiary value of the market structure, however, is imperfect. There are examples of highly concentrated industries which are very competitive and where one experiences fierce rivalry. Conversely, cartels are known to have existed and prospered for many years in industries with numerous competitors and differentiated products.¹¹⁷</td>
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<td>The agencies’ practice does not provide clear answers to the question of whether an exchange of information may be deemed anticompetitive in a competitive market situation. In the UK Agricultural Tractor Registration Exchange decision, for example, the European Commission did not eliminate the possibility that there may be instances where communications between competitors may lead to collusive outcomes even in fragmented/non-oligopolistic markets. On this specific issue, it is interesting to consider a decision of the Italian Competition Authority which found a restriction of competition in an exchange of information between competing insurance companies in a market which was not considered to be oligopolistic. In the RC Auto decision,¹¹⁸ the AGCM argued that even in non-oligopolistic markets an exchange of information may be restrictive of competition if it concerns prices and consumers do not benefit from the increased transparency. The AGCM argued that, despite the fact that the market was not concentrated, constant price increases and parallel commercial strategies were evidence of scarce competition on the market. The AGCM also argued that the need to exchange information as a system to ensure stability of a collusive agreement is higher in non-concentrated markets where the cost of collecting information on competitors is significantly higher in markets where only a few players are active.¹¹⁹ In these cases, the burden of proof on the competition agencies is certainly high. If the market is fragmented, the agencies have to provide persuasive and credible evidence that despite the non-concentrated nature of the market there are other factors that are likely to give rise to tacit collusion.</td>
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61. In theory, price collusion is more easy to reach, monitor and sustain over time if the collusive agreement concerns products which are homogeneous. If products characteristics differ in attributes such as quality and durability, it becomes difficult for firms to detect whether variations in sales are due to changing buyer preferences or cheating strategies by firms in the form of secret price cuts. Economists, however, also note that under certain circumstances the differentiated nature of the products may also facilitate collusion. In case of differentiated products, deviations are in fact less profitable because the cheating firm cannot expect to gain large market shares from such strategy, unless it is prepared to cut prices significantly. In such circumstances, therefore, product differentiation makes collusion more likely.

62. Exchange of information in homogeneous product markets are more likely to facilitate collusion. For example, since its earliest policy statements, the European Commission has drawn a distinction between exchanges of information in homogeneous product markets and exchanges of information in differentiated product markets. It is easier for companies to coordinate on price for a single, homogeneous product than for many differentiated products. In differentiated product markets, access to detailed sensitive information about competitors may not be useful to predict future behaviour of competitors and therefore may not lead to an increase of coordination between them. The difficulties in comparing differentiated products make the information difficult to interpret and to individualize. For this reason, the European Commission did not raise concerns in the EUDIM case,¹²⁰ where the information exchanged

¹¹⁷ See OECD, 2006, para 15.
¹¹⁸ See Bollettino 30/2000.
¹¹⁹ For a commentary on the AGCM decision, see Porrini, 2004; Grillo, 2002.
covered a range of over one million products. The European Commission therefore concluded that in this case even the exchange of individual and confidential information would not lead to any restriction of competition.

5.2 The characteristics of the information exchanged

63. A second set of relevant considerations for the assessment of information exchange systems relates to the characteristics of the information exchanged. Agencies usually make distinctions between the type of information that is exchanged and distinguish the information according to the degree of detail in which it is communicated and the frequency of the communications. The rationale for such distinctions lies in the fact that not all information allows competitors to identify each other’s future strategies.

5.2.1 The subject matter

64. As for the subject matter of the information exchanged, not all information has the same relevance. Confidential information (i.e., information on the very nature of the business, such as prices, quantities, commercial strategies, and the like) generally cannot be disclosed to competitors. Competition law enforcers are often very suspicious when information is exchanged between competitors regarding these sensitive competitive variables. Such information exchanges are considered to assist in the establishment, administration and enforcement of a collusive understanding between competitors. In particular, such information is considered critical for competitors to monitor any digression from a collusive arrangement.

65. The exchange of information on market demand, costs or publically available data are usually considered to be less problematic, as it does not necessarily reduce uncertainty about rivals’ conduct, although market estimates (or aggregate demand) may allow firms to see whether decreases in individual demand are due to negative shocks in the market or cheating. Agencies, however, have considered as an infringement of competition rules the exchange of information such as product deliveries, deliveries to customers, capacity utilization, output and sales figures and market shares. The relevance for collusion of some of these data is not clear-cut; the analysis therefore may not be done in abstract, but must refer closely to the economic context and to the alleged collusive risk (i.e., data on deliveries to customers may be very relevant if the risk of collusion relates to customer allocation, but may be irrelevant if the collusive arrangement is on the level of discounts).

5.2.2 The level of detail of the information exchanged

66. The level of detail of the information exchanged is also likely to influence the ability of the firms to coordinate their market strategies. The higher the level of detail, the higher the possibility for competitors to predict each others’ future conduct and to adjust accordingly. In general, agencies do not object to the dissemination of aggregated data, which does not allow for identification of the information related to individual companies. Exchanges of genuinely aggregated data, i.e., where the recognition of

123 Kühn and Caffarra distinguish between sharing of sales information and delivery information. Delivery information may not necessarily assist firms in monitoring a collusive agreement in markets where delivery figures do not correspond to sales figures. They further explain that aggregated delivery information shared in certain markets may have substantial efficiency benefits and little collusive potential (see Kühn and Caffarra, 2006). Similarly, Vives shows that in certain circumstances exchanging cost information may have large efficiency benefits and therefore these efficiencies would have to be taken into account appropriately (see Vives, 2007).
individualised company level information is sufficiently difficult, are less likely to lead to restrictive effects on competition than exchanges of company level data. However, there may be instances where even the exchange of aggregated data should be prohibited. According to Peeperkorn, “[...] below a critical market price level, the oligopolists will automatically assume that someone has cheated and trigger off a price war. This means that aggregate price information could be of use to oligopolists when trying to collude. Aggregate output information will even be of more use to them as this would reveal immediately whether someone is defecting.” There are no general criteria for determining the minimum level of aggregation required to prevent an antitrust investigation; when confronted with aggregated information, agencies verify that it is sufficient to prevent any identification on a case-by-case basis.

5.2.3 The age and the reference period of the information exchanged

67. Agencies are usually concerned with exchanges of data regarding future strategies, including prices, sales, and capacities trends. This information is particularly sensitive and should remain within the corporate knowledge of each company. The sharing of future pricing intentions directly between competitors is probably the most useful information in enabling them to reach a focal point, and hence is viewed as the most harmful. Sharing information about current or past behaviour may not be as useful as information about future behaviour in identifying focal points. Historical information (even if regarding individual firms) has generally lost its value as a competitive asset to be able to affect future conduct of the companies involved; therefore, their exchange is generally not considered harmful. Information older than 12 months are generally considered historical, but this assessment should be made on a case-by-case basis, based on the specific characteristics of the market in question. The exchange of current information is more likely to be considered an infringement of competition law if the information can be used to determine the conduct of participants in the market at the time of the exchange. Because of the incentive of each individual colluding party to undercut and free-ride on the high price charged by the others, one of the most difficult problems for the colluding parties is to detect secret price cuts or secret sales in addition to the collusive quantities or quotas. Information about prices and quantities charged by the colluding firms is essential for monitoring deviations.

124 See para 85 of the European Commission’s Draft Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements.

125 See Peeperkorn, 1996.

126 However, information about past behaviour may still be used to achieve a collusive understanding. This can happen in two cases. First, through public announcements of price information a price leader may create a focal point around which similar price increases may be tacitly implemented by other firms. Secondly, sharing information about past costs or demand may make it easier for firms to come to a tacit understanding on a focal point for coordination. For example, sharing detailed current price information provides firms with a clearer idea of each other’s position in the market. This reduces the number of possible focal points on which price coordination may take place and therefore makes it easier to pick a single point.

127 See para 86 of the European Commission’s Draft Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements: “The exchange of historic data is unlikely to lead to a collusive outcome as it is unlikely to be indicative of the competitors’ future conduct or provide a common understanding on the market.”


129 See para 86 of the European Commission’s Draft Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements.
5.2.4 The frequency of the exchange

Another factor that may affect the assessment of an exchange of information relates to the frequency of the exchange. Frequent data exchanges allow companies to better (and more timely) adapt their commercial policy to their competitors’ strategy. In addition, for collusion to be sustainable it is necessary that punishment of deviations is credible and effective. It is therefore necessary that the cheating is detected sufficiently fast, in order to limit the gains from it. Again, the frequency of the exchange should be considered in relation to the characteristics of the market and to the specific facts of the case. For example, in markets with long term contracts (which are indicative of infrequent price re-negotiations) a less frequent exchange of information could therefore normally be sufficient for reaching a collusive outcome than in markets with short term contracts and frequent price re-negotiations.

5.2.5 The public availability of the information

Generally, the exchange of public information is not considered as an infringement of competition rules. In its judgment on the TACA case, for example, the GC was asked to review the European Commission’s conclusion that an exchange of public information was an infringement under Article 101 TFEU. The GC noted that if the information is in the public domain as a result of mandatory disclosure requirements (in that case compulsory publication under US law) or if it can be easily deduced from publicly available information, the exchange of this information between competitors cannot be considered an infringement of the EU Treaty competition rules. Most agencies, however, interpret the notion of “publicly available information” narrowly: in order not to give rise to competition concerns the information exchanged has to be genuinely public, i.e., the information must be readily observable and available to everyone (i.e., to both competitors and customers) and at no cost. Search and collection costs play an important role. If the information is available to the public but its retrieval and difficult and costly, the information is not genuinely available to the public.

6. Regulation of competitors communications: some policy questions

6.1 Should information exchanges be prohibited per se?

Very few per se rules are justified in competition law and limited to those cases where the anti-competitive effects of the practice can never be outweighed by pro-competitive effects or by efficiency justifications. Form-based approaches to antitrust illegality have been progressively eliminated in many jurisdictions or at least undermined in favour of an effects-based approach. As seen above, there are no reliable form-based rules that determine if an information exchange has pro or anti-competitive effects.

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130 See para 87 of the European Commission’s Draft Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements.
134 For this reason, in the RAS-Generali/IAMA Consulting case, the Italian Competition Authority considered that the fact that the information was obtained by the third-party consulting company in charge of creating the information database directly from the different competitors indicated that the information itself was not in the public domain. If the information was readily available, there would be no reason to set up a costly exchange system.
This seems to advocate against a per se approach to assessing information exchanges. Also from an economic perspective, the notion of a per se rule against information exchanges has no support. Information exchanges cover a very broad spectrum of practices whose pro- or anti-competitive effects are very dependent on the economic context, and that leads to the conclusion that in this area of enforcement, a structured effects-based approach should be favoured. Courts have also supported a rule of reason approach to information exchanges. For example, the US Supreme Court in the Container case discussed under Section 1 of the Sherman Act a stand-alone information exchange—as opposed to merely using the information exchange as evidence upon which to infer a pricing agreement. It concluded that “[t]his exchange of information is not illegal per se, but can be found unlawful under a rule of reason analysis.”

71. A structured approach under the rule of reason should start by assessing if the market structure and the product characteristics are such that there is a risk of collusion should transparency increase; if the answer to this first question is positive the analysis should move to the analysis of the types and the nature of the information exchanged (such confidential nature, public availability, etc.) and to the characteristics of the exchange (such as frequency, aggregation, etc.) to assess the effects of the exchange on competition and the likelihood of collusion. For example, a concern that exchange of price information could facilitate price collusion might be rejected if the market is very fragmented or it is too dynamic to sustain price-based collusion. Such concerns may also be rejected if the information exchanges are not sufficiently precise, detailed and/or frequent to allow firms to reach an understanding on a common line of conduct which is likely to weaken competition.

6.2 Should some information exchanges be anti-competitive “by object”?

72. Agreements that are anti-competitive “by object” automatically breach competition rules, and there is no need for the competition agency to establish that they have anticompetitive effect. These agreements, as opposed to agreements which are anti-competitive per se, can always be justified by efficiency reasons. If a conduct restricts competition “by object”, this suggests that the role for economic analysis in assessing the legality of such agreements is limited. The competition agency does not have to show that the agreement has anti-competitive effects as that conclusion is so self-evident that it does not need to be established. The parties to the exchange, though, can show that the exchange generates sufficient efficiency gains (e.g., it helps firms to better forecasts sales) and that those benefits cannot be realised through the less harmful means.

73. Part of the literature and the enforcement practice of some competition agencies have identified one type of information exchange that ought to be considered a restriction “by object”: private exchanges of firms’ individual plans for future conduct, such as future prices and volumes. The exchange of such kind of information is viewed as very close to the establishment of a price fixing arrangement between the parties that share the information. The rational for this approach is that it may make economic sense to attribute a presumption of illegality to exchanges of information which are very likely to have an anti-competitive effect and unlikely to have an objective or pro-competitive justification. This view was recently endorsed by the CJEU in its recent ruling in T-Mobile, in which the CJEU held that “an exchange of information which is capable of removing uncertainties between participants as regards the timing, extent and details of the modifications to be adopted by the undertaking concerned must be regarded as

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137 See RBB, 2009.
138 See, for example, Kühn, 2001; Bennett and Collins, 2010; Swedish Competition Authority, 2006.
139 See Kühn, 2001.
pursuing an anti-competitive object.”

Others have argued that a restriction by object is not justified even in these circumstances. It has been argued the categorisation of information exchanges as conduct that is anti-competitive “by object” seems to provide an exception to the increasing influence of economic analysis and that there is no justification for placing such conduct in the same automatic presumption of anticompetitive “object” category as full-scale horizontal price-fixing.\(^\text{141}\)

74. All other types of information exchanges are generally reviewed under competition rules based on their effects on competition. Some exchanges will more likely have an impact on competition, such as exchanges of individualised current sensitive information, than others, such as the exchange of aggregated historic information which are in the public domain. In these cases, the assessment will depend on the market structure, on the product characteristics and on the type of information which is exchanged.

6.3 Can an information exchange be justified on the basis of efficiencies?

75. Even where an exchange of information between competing companies might have adverse effects on competition in the market, it may be possible to justify it, and thus benefit from an exemption from the prohibition on anti-competitive agreements. Indeed, most agencies recognise in their policy statements that information exchange may lead to significant efficiency gains.\(^\text{142}\) Many of the possible efficiencies have been discussed above and they include a more efficient allocation of production, benchmarking, signalling quality to consumers or helping consumers to make a more informed choice about products. It is up to the companies to provide good evidence to support the claimed efficiencies. In addition a number of other conditions must be satisfied. Most countries require the parties to show that the efficiencies generated by the enhanced transparency outweigh any restrictive effects on competition, that a fair share of the efficiency gains must be passed on to consumers and that the information exchange must not go beyond what is necessary to achieve the relevant efficiency gains.

6.4 Are there permitted exchanges? Is there room for safe harbours?

76. It has been argued by some scholars\(^\text{143}\) and by some courts\(^\text{144}\) that the exchange of truly aggregated data (i.e., data that cannot be disaggregated to reveal individual firms’ information) should be considered \textit{per se} permitted, as it never allows for the targeted sanctioning of deviations from a collusive arrangement. This thesis, however, has not found support in the economic literature, which concludes that targeted sanctioning is not the only possible credible and effective punishment which makes collusion sustainable. Even the dissemination of aggregate information can reveal to the cartelist that a cheat has occurred can trigger reactions that stabilise collusion.\(^\text{145}\) The recent Draft Guidelines of the European Commission on the applicability of Article 101 to horizontal co-operation agreements supports this conclusion when it says that: “[…] the exchange of aggregated data may also lead to a collusive outcome.”

\(^\text{140}\) See case C-8/08, \textit{T-Mobile Netherlands and others}, judgement of 4 June 2009.

\(^\text{141}\) See RBB, 2009.

\(^\text{142}\) See for example the Canadian Guidelines on Competitors Collaboration, section 3.7.1; Draft Guidelines of the European Commission on the applicability of Article 101 TFEU to horizontal co-operation agreements, section 2.3.1; US Antitrust Guidelines for Collaborations amongst Competitors, section 3.31.(b).

\(^\text{143}\) See Tugendreich, 2004, p. 175 and 221; see also Kühn and Caffarra, 2006 according to which some types of information exchanges, such as the exchange of aggregated information and cost data should always be allowed.

\(^\text{144}\) See Oberlandersgericht Dusseldorf, decision in case Kart. 37/01, Transportbeton Sachsen, 26 July 2002, WuW/E DE-R 949.

For example, members of a tight and stable oligopoly exchanging aggregated data could automatically assume that someone defected from the collusive outcome when noticing a market price below a certain level.\footnote{\textsuperscript{146}}

77. However, the question of whether there are information exchanges which are highly unlikely to affect competition and should therefore enjoy of a safe harbour remains valid. Some agencies have introduced structural safe harbours for all co-operation agreements. In the US, for example, under the Antitrust Guidelines for Collaborations amongst Competitors the US agencies under normal circumstances do not challenge a competitors collaboration when the market shares of the participants collectively account for no more than 20% of the relevant market. It has been recently argued that \"[...] one possibility may be to base the safe harbour on some threshold of the market covered by the information sharing. It must be acknowledged that deriving a specific threshold for such a safe harbour is always somewhat arbitrary. However, given the level of other safe harbours within the guidelines, 20% may be a sensible starting point to consider. Any such safe harbour would also have to be subject to a cumulative coverage test similar to the cumulative test within the vertical guidelines. This would prevent networks of information sharing that would allow firms to have access to information covering the entire market. In this context, 30% may be a sensible starting point to consider for such a cumulative test.\"\footnote{\textsuperscript{147}}

78. Agencies should consider if, in addition to a structural safe harbour, other types of information should fall in the safe harbour, such as truly historical information, publicly available information and aggregated information. The introduction of safe harbours in this area would offer businesses, and particularly small businesses, the required legal certainty to engage in pro-competitive information sharing. All information exchanges falling outside the safe harbour should not be considered as anti-competitive, as this might discourage firms from engaging in beneficial exchanges, such as industry-wide collation of aggregated historic information on sales and price trends.

7. Conclusions

79. Exchange of information between competitors is a complex area of competition law enforcement. The economic and legal debate on the pro and anti-competitive effects of transparency on competition and firms’ incentives to collusion is likely to continue to affect the antitrust enforcement activities in this field.

80. This is an area of law which is deeply affected by the economic theories on tacit collusion, and where compliance with competition rules is therefore complex. For this reason, companies are looking for legal certainties as to what kind of communications are allowed under competition law and as to which factors they should consider when entering into exchange of information systems with competitors. The distinction between exchanges of information within a traditional cartel context, exchanges of information as stand-alone infringements of competition rules, and pro-competitive exchanges of information will certainly benefit from clear guidance from antitrust enforcers.

81. It is difficult to elaborate general and theoretical rules to distinguish a restrictive exchange of information from an exchange of information which is at least neutral, if not pro-competitive and efficiency enhancing, from a competition policy perspective. The approach must be on a case-by-case basis and cannot ignore the economic context in which the participants to the information exchange are active. The economic literature has identified cases where artificially increased transparency is a factor leading to collusion and others where increased transparency is pro-competitive and therefore to be enhanced.

\textsuperscript{146} See para 85.

\textsuperscript{147} See Bennett and Collins, 2010.
82. In general, where there is suspicion of coordination, transparency can be seen as further facilitating the participant’s ability to monitor one another’s behaviour and to identify “cheating” on unlawful coordination agreements. The exchange of core competitive information (e.g., information on price, quantity and future strategies) is viewed as particularly problematic because it increases supply-side market transparency. The artificially increased transparency eliminates the uncertainty on the future conduct of competitors that provides such a motivating force in competitive markets.\(^{148}\) This is the reason why many agencies distinguish between an exchange of information concerning historical \textit{versus} future pricing, quantity or general market strategies. Information sharing becomes even more of a concern where the participants to the exchange of information operate in a concentrated market and/or where they represent a substantial part of the market.

83. There are questions which are still debated, such as to what extent an exchange of information may restrict competition in a non-oligopolistic market, the legitimate use of independent third-parties consultants for collecting and disseminating market information or the potential restrictive effect of public statements of future commercial strategies. Other questions relate to whether information exchanges should be viewed as a \textit{per se} infringement of competition rules or should be assessed under a structured rule of reason. Finally, agencies should address the question of how to provide more clarity and legal certainty to companies who might engage in these type of practices. The use of restriction by object, on the one hand, or of safe harbours, on the other hand, could meet this need.

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