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COMPETITION DISCUSSION PAPER

# An introduction to the economic effects of information exchange amongst competitors

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Information exchange (“IE”) amongst competitors in the absence of an explicit cartel agreement has drawn increasing attention from competition authorities at European and national level.

Depending on the content and the form of IE, as well as the characteristics of the industry in which the information is exchanged, an IE can have pro- and/or anti-competitive effects. An IE may have pro-competitive effects if it benefits consumers directly or indirectly, sometimes conditional on the participating company's discretion to pass on its own benefits. Anti-competitive effects are mainly associated with IE that facilitates collusion, e.g. through the creation of reference points for a collusive market outcome or by increasing the internal or external stability of an implicit collusive agreement. In the latter case, IE facilitates the companies' ability to timely detect and punish any deviation from the collusive outcome, or market entry of new companies, respectively. Pro- and anti-competitive effects of an IE can be co-incident. Consequently, the overall assessment of an IE must carefully disentangle and weigh the different effects.

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## Introduction

Sharing information is a common practice amongst companies in various industries and occurs for example at trade fairs, via press releases or through industry associations.<sup>1</sup> While information exchange (“IE”) can take place as part of legal co-operation agreements amongst competitors or in the context of cartels, this discussion paper focuses on IE amongst competitors in the absence of any pre-existing explicit agreement. Investigations into IE as stand-alone restriction of competition are growing at European and national level.<sup>2</sup> Against this background, companies should be aware of the potential effects IE may have on competition.

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<sup>1</sup> In this discussion paper, the terms sharing information and exchanging information are used as synonyms.

<sup>2</sup> For an overview of cases see Russo, F., M.P. Schinkel, A. Günster, and M Carree (2010), “European Commission Decisions on Competition: Economic Perspectives on Landmark Antitrust and Merger Cases”, Cambridge University Press. Examples for more recent cases are European Commission (“Commission”) (2016), “Case AT.39850 Container Shipping”. Available at >>

Competition authorities (“CAs”) and companies engaging in IE tend to have different perspectives on the matter. The former are primarily concerned with protecting effective competition and consumer welfare. Efficiencies are considered only if a restriction of competition, by object or by effect, has been established. Companies are mostly concerned about enhancing their profitability through IE. Whether the IE benefits consumers and/or has anti-competitive effects tends not to be the focus of a company's decision on whether and how to exchange information.

Nonetheless, exploring such potential effects is important to prevent the risk of infringing competition law and being fined. Should a CA raise concerns regarding anti-competitive effects, companies should be able to rebut them. Additionally, the burden of proving that the consumer benefits outweigh any adverse effects lies with the company. This requires

an analysis of the means through which the IE impacts competition given the market conditions.<sup>3</sup> While the Commission issued guidelines that should aid this examination, further economic analysis is required to disentangle and weigh the different effects.<sup>4,5</sup>

## Beneficial effects of IE

Some types of IE may benefit consumers directly while others do so only if the company decides to pass on (a share of) its own additional benefits. In both cases, it is important to establish a causal link between the IE and the claimed benefits. This involves explaining the detailed mechanism through which the IE may lead to the alleged benefits, as well as demonstrating a high likelihood of realising these benefits.

### Direct benefits for consumers

One group of IE which can benefit consumers directly reduces consumers' search costs. For example, if companies publish their current prices on price comparison websites, this benefits consumers directly; they can compare prices more easily and seek alternative sources of supply. Similarly, from information about a product's sales or a company's market share, consumers may draw conclusions about product quality. Information that is likely to be the most useful to customers for this purpose is recent,

<sup>3</sup> Such assessment should address the type of information, the point in time it is shared as well as the form of the IE, e.g. information may be shared directly amongst competitors, or indirectly through an industry association or data brokers.

<sup>4</sup> Commission (2011), "Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements", para. 72-75. Available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114\(04\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114(04)&from=EN) (accessed: 26.09.2017) ("Guidelines").

<sup>5</sup> For a discussion of the legal framework and related case law in Europe see Healy, M., and D. Wood (2017), "Information Exchange. European Union". Available at: <http://globalcompetitionreview.com/jurisdiction/1003168/european-union> (accessed: 26.09.2017).

company- and product-specific data.

Other types of IE advantage consumers directly by altering the competitive environment. Increased market transparency may facilitate the market entry of new suppliers. Sharing information on demand and prices may enable smaller suppliers, with less detailed information on market trends, to compete more effectively. The same form of IE may enable companies to allocate production to high-demand areas, improving allocative efficiency.

### Indirect benefits for consumers

Exchanging information may create cost-savings (efficiencies) for the partaking companies. For example, a company may use aggregate information on rivals' performances for benchmarking. In turn, this may lead to cost savings as companies try to improve their positions in the market. If demand in an industry is unsteady and difficult to forecast, sharing demand prognoses may help companies to improve their predictions, and may enable them to reduce inventories and associated costs.

IE can also reduce information asymmetries.<sup>6</sup> In the Asnef-Equifax case, the court considered that a proposed register, through which banks shared credit data, reduced the information asymmetry between creditors and debtors. Thus, the IE was capable of improving the functioning of the credit supply.<sup>7</sup>

<sup>6</sup> Information asymmetry occurs when one party has more information than another and can result in market inefficiencies. For example, a consumer requesting a loan is better informed about its default risks than the bank, which cannot tailor the loan contract to match the consumer's risk profile.

<sup>7</sup> European Court of Justice (2006), "Case C-238/05 – Asnef-Equifax", para. 47, 55, and 67. Available at: <http://curia.europa.eu/juris/showPdf.jsf?text=&docid=65421&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=1292658> (accessed: 26.09.2017).

However, consumers benefit only if the efficiencies are passed on to them by the companies via price cuts, improved service or product quality, etc. The more indirect a benefit, the more difficult it will be to prove its occurrence.

## Adverse effects of IE

The Guidelines advance two theories of harm: IE may (i) facilitate collusion and (ii) lead to anti-competitive foreclosure.<sup>8</sup> We focus on the former, which is derived from so-called dynamic models of tacit collusion.<sup>9</sup> Such models predict that companies will only engage in collusion, if i) the companies in the market have a common understanding of the terms of collusion, and ii) the companies are able to monitor adherence to the collusive agreement, and detect and punish any deviation from the collusive outcome and the market entry of new companies in a timely manner.

IE may enhance the likelihood that these two criteria are fulfilled, linking IE and competitive harm. In general, however, anti-competitive effects of IE are expected only in markets that have been susceptible to collusion pre-IE. The following are cited as characteristics of such markets: high concentration, homogenous companies and products, stable demand and supply conditions, and high market transparency. The question whether a market is conducive to collusion should, hence, be addressed before engaging into a detailed analysis of anti-competitive effects of a specific IE. The latter must identify the precise mechanism by which

the IE may lead to anti-competitive harm (e.g. higher prices and/or lower quantities).

### Co-ordination on the terms of collusion

In the absence of an explicit agreement, companies willing to collude face a coordination problem with respect to the terms of collusion (e.g. whether to co-ordinate on price or quantity and decide on the level). IE may enable companies to overcome this problem.

As the co-ordination problem refers to future conduct, any IE concerned with prospective behaviour is particularly suited to enable co-ordination. If, for example, a market leader regularly publishes its intended future prices, these may serve as a so-called focal point for competitors.<sup>10</sup> The IE may induce them to set the same price. While the legal assessment of whether the IE involves committed future prices or intended prices differs, the economic effects may be similar.<sup>11</sup> In fact, comparable co-ordinated effects may arise from IE on current prices, if it reveals information on company's future conduct. This depends on how frequently prices are adjusted in an industry.

Potential anti-competitive effects will also depend on the level of aggregation of the information exchanged. Whilst the example above relates to company-specific data, in principle, aggregated data can equally act as a focal point. If an industry association distributes an industry-wide expected average price to its members, the average may serve as a focal point if the products offered

<sup>8</sup> See Guidelines, para. 64-71.

<sup>9</sup> See Kühn, K., and X. Vives (1995), "Information exchanges among firms and their impact on competition", p. 43. Available at: <https://publications.europa.eu/s/dvWr> (accessed: 26.09.2017).

<sup>10</sup> The term focal point refers to a reference point for a market outcome, e.g. a certain price (here) or quantity but also an allocation of regional markets amongst suppliers.

<sup>11</sup> Only sharing of individualised intended future price or quantity data is per se considered as an infringement by object. See Guidelines, para. 74.

by the different companies are homogenous.<sup>12</sup> In contrast, if each company in the market offers a differentiated product and the price dispersion of these products is large, industry-averages, unlike company-specific data, will not reveal sufficient information on each individual company's future conduct. In other circumstances, e.g. if a company offers a differentiated product portfolio on the same market and communicates the average price increase, even company-specific data may be insufficient. In such cases, only product-specific data may act as a focal point.

While focal point theory provides the mechanism through which IE may help companies to co-ordinate, the effect of the IE depends on whether the potential focal point is implemented and sustained.

### Detection and punishment of cheating

Assuming companies have formed an implicit agreement on the terms of collusion, monitoring adherence to the collusive outcome requires information on rivals' current or past prices and quantities sold. Whether IE can aid such monitoring depends crucially on industry-specific conditions, e.g. the degree of market transparency, concentration, product variety and the demand structure.

Any cheating must be detected quickly to ensure timely and effective punishment; both the age of the information and the frequency of the IE are relevant. While current and recent-past data will enable companies to identify deviation, historic data will generally

<sup>12</sup> For example, the FCO objected to the distribution of average prices paid by competing dairies, where the addressee of the information could decide which dairies' prices the average would consist of, as such an IE may foster the formation of regional price cartels. See FCO (2011), "B2-118/10, Fallbericht: Standard für kartellrechtskonforme Gestaltung von Marktinformationssystemen im Bereich der Beschaffung von Rohmilch", p. 5. Available at >>

be less useful. The time at which the data is classified as historic depends on the market characteristics (i.e. average duration of contracts, stability and transparency in the relevant industry); there is no clear-cut rule.<sup>13</sup>

Moreover, the level of aggregation of the exchanged information affects a company's ability to detect and punish deviation. Individualised data enables the identification and targeted punishment of cheaters and would give rise to concerns. Nevertheless, even aggregated data may help a company to identify whether incurred sales losses are a result of cheating, market entry or a reduction in overall demand. For instance, given a company's knowledge of its own sales, it can use information on total sales, obtained through IE, to calculate its market share. Cheating can be inferred by the company if its market share decreased. Accordingly, even the exchange of market shares or capacity utilisation figures may enable companies to detect cheating, although with lower precision. Nonetheless, CAs and courts appear to have fewer concerns about sharing aggregated data, even in industries considered prone to collusion. However, the criteria that need to be met for the data to be considered genuinely aggregated may be high.<sup>14</sup>

<sup>13</sup> For instance, the FCO forbid the distribution of two-year-old volume and price data in the cement industry. As market conditions had unlikely changed significantly during the two years, the data was considered sufficiently recent to enable companies to identify any competitive initiatives and take punitive actions. See FCO (2017), "Sektoruntersuchung Zement und Transportbeton. Abschlussbericht gemäß § 32e GWB – Juli 2017", para. 612-614. Available at: [http://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Sektoruntersuchungen/Sektoruntersuchung%20Zement%20und%20Transportbeton.pdf?\\_\\_blob=publicationFile&v=4](http://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Sektoruntersuchungen/Sektoruntersuchung%20Zement%20und%20Transportbeton.pdf?__blob=publicationFile&v=4) (accessed: 26.09.2017).

<sup>14</sup> For example, a German court set out four requirements regarding a proposed market information system ("MIS") in the ready-mixed concrete sector: (i) at least five companies that delivered to the relevant region submitted data, (ii) which were both independent from each other and from any other member of the MIS, and (iii) not to reveal their participation in the MIS. Also, (iv) the number of participating companies was not to be published. See FCO (2017), para. 617f.

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## Overall assessment and conclusion

Companies that consider exchanging information should carefully assess both the IE's intention and its likely effects. The generation of efficiencies for companies neither automatically entails consumer benefits nor precludes the generation of anti-competitive effects. As discussed, the type of information which is most likely to yield direct benefits to consumers (recent company- and product-specific data) is also the most useful for concertation amongst the involved companies. Hence, whilst anti-competitive effects or intentions should not generally be presumed solely on the type of information exchanged, IE cannot be regarded as unproblematic without critical investigation. If a specific IE raises a CA's concerns, companies must be able to rebut these and demonstrate that benefits to consumers outweigh any anti-competitive effects.

With respect to efficiencies, this requires showing that consumers benefit directly or indirectly and that the anti-competitive effects are indispensable for realising those benefits. This last criterion will not be met if similar efficiencies could be generated through less restrictive means. Consequently, the IE should not involve more data than necessary for the desired purpose. For example, to reduce information asymmetry, banks may share information on risks but there will usually be no need to exchange risk premiums (i.e. price).

With respect to anti-competitive effects, first the question of whether the market is conducive to collusion should be addressed. In a second step, the precise mechanism through which the IE may potentially lead to anti-competitive harm (e.g. higher prices)

must be explored. This analysis should consider all relevant elements of the IE: the sender, type, and addressee of the information, and industry characteristics.

As noted above, economic analysis can play a crucial role in determining whether an IE has net benefits for competition and for avoiding instances where it leads to anti-competitive outcomes. CAs have increasingly brought cases based on IE. However, trade-offs between potential efficiencies and anti-competitive effects are rarely considered. Furthermore, often the theory of harm is inadequate and the demonstration of the mechanism how the IE results in anti-competitive effects is missing. Where the theory of harm holds water, sustainable anti-competitive effects lead to competitive damage and potential court action. Claims for anti-competitive effects and damages then need to be tested for their validity. Consequently, a relevant economic analysis is not limited to general economic theory but also includes the case-specific causal mechanism and eventual collusive effects.

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## About the authors

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