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# Data Pools as Information Exchanges between Competitors: An Antitrust Perspective

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On 14 May 2019, the European Commission announced the launch of an antitrust investigation into the Insurance Ireland data pooling system. The Commission wants to assess whether the conditions of access to the system are in breach of Article 101 of the Treaty on the Functioning of the European Union (TFEU), which prohibits anticompetitive agreements. Also, according to the Commission Communication *A European Strategy for Data*, the upcoming review of the Horizontal Cooperation Guidelines will need to provide additional guidance precisely on possible clashes between data pools and EU competition law. Albeit largely unexplored, the topic is, therefore, getting more and more relevant. This cep**Input** aims at contributing to the public debate by providing insights into a very specific issue, i.e. whether and how the analytical tools used to assess the compatibility of information sharing with Article 101 TFEU could be used in the context of the antitrust review of data pools.

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#### 1 Data pools: commercial benefits and antitrust risks

A data pool is a data sharing system between companies "which involves an element of reciprocity, whereby at least some companies contribute data"<sup>1</sup>.

Data pools are nowadays perceived as a key factor for commercial success: within the digital economy, access to large quantities of data brings important (if not essential) economic advantages. Notably, it enables substantial productivity growth and process optimisation and offers the opportunity to create brand new products and services. Also, it allows the emergence of aftermarkets.

This explains the increasing number of data-pool initiatives at national and EU level. Among them, we can list the establishment of the EU Reference Laboratories (EURL) DataPool, which gathers pesticiderelated data in the EU to improve the efficiency of pesticide residue analysis<sup>2</sup>. Also, the German government has recently launched "Project GAIA-X", an initiative to develop a European data infrastructure. Its aim is to allow European companies to benefit from the advantages of broad access to data by integrating domain-specific data pools – e.g. in the health, automotive or financial sectors<sup>3</sup>.

Data pooling arrangements are generally pro-competitive in so far as "[t]*hey enhance data access, may resolve data bottlenecks and contribute to a fuller realisation of the innovative potential inherent in data. The pooling of data of the same type or of complementary data resources may enable firms to develop new or better products or services or to train algorithms on a broader, more meaningful basis*"<sup>4</sup>. However, as the investigation into the Insurance Ireland data pooling system shows, data pooling arrangements may expose the parties to antitrust liability.

Depending on the circumstances of the case, a data pooling agreement could qualify as a forbidden information sharing agreement, allowing participants to collude, or as an abuse of collective dominance, which involves denying access to competitors that are not part of the agreement or granting access to such competitors on non-FRAND<sup>5</sup> terms. Also, due to the necessity of conferring data to the pool in a specific format to allow mutual use, a data pooling arrangement could encompass a forbidden standard setting clause, which keeps third parties out of the technology market<sup>6</sup>. In this regard, it should be underlined that the antitrust review of the concrete terms of cooperation can lead to dramatically different results depending on the technology chosen by the participants, the legal vehicles and the scenario framing it.

This cep**Input** assesses the suitability of the existing legal standard of review with regard to the anticompetitive sharing of information with data pools. Accordingly, it will first set out this existing legal standard (Chapter 3). Then, in Chapter 4, it will focus on the following issues: (i) under what conditions does data qualify as information for the purpose of Article 101 (1) TFEU; (ii) if and, if so, how the openness of data to different uses is relevant for the application of Article 101 (1) TFEU.

<sup>&</sup>lt;sup>1</sup> European Commission, Antitrust: Commission opens investigation into Insurance Ireland data pooling system, Press Release, Brussels, 14 May 2019, accessible at <u>https://europa.eu/rapid/press-release\_IP-19-2509\_en.htm</u>

<sup>&</sup>lt;sup>2</sup> European Commission, EURL DataPool, accessible at: <u>https://www.eurl-pesticides-datapool.eu/</u>

<sup>&</sup>lt;sup>3</sup> Federal ministry for Economic Affairs and Energy and Federal Ministry of Education and Research, Project GAIA-X – A Federated Data Infrastructure as the Cradle of a Vibrant European Ecosystem, October 2019, p. 6.

<sup>&</sup>lt;sup>4</sup> Crémer J., de Montjoye Y. and Schweizer H. (2019), Competition policy for the digital era, Final Re-port for DG Competition of the EU Commission, p. 92.

<sup>&</sup>lt;sup>5</sup> Acronym for "Fair, Reasonable and Non-Discriminatory".

<sup>&</sup>lt;sup>6</sup> For a review of the competition concerns raised by data pools, see Crémer J., de Montjoye Y., Schweizer H. (2019), pp. 96 ff.

Finally, this is followed by an assessment of the role that countervailing efficiencies could play in the antitrust review of data pools (Chapter 5).

### 2 Data pools under Article 101 (1) TFEU

#### 2.1 Information sharing between competitors under Article 101 (1) TFEU

Article 101 (1) TFEU forbids all agreements between undertakings, decisions by associations of undertakings and concerted practices, which may affect trade between Member States, and which have as their object or effect the prevention, restriction or distortion of competition within the internal market. Also, the provision contains a non-exhaustive list of prohibited practices.

While information sharing between competitors does not appear in the above list, the Commission's enforcement practice and the case-law of the CJEU clearly show that similar forms of coordination can run afoul of Article 101 (1) TFEU. Indeed, information sharing can play different roles in the context of anticompetitive practices: first, it may be part of a broader cartel infringement<sup>7</sup>; secondly, it may support a wider cooperation agreement such as a standardisation or R&D agreement; thirdly, it may be sanctioned *per se*<sup>8</sup>. This cep**Input** will focus on the last scenario as data sharing agreements can fall into this category.

#### 2.1.1 The Commission's Guidelines

According to the Commission's *Guidelines on Article 101 TFEU*<sup>9</sup>, the increased level of market transparency that information sharing brings about is, in principle, a wholly positive, efficiency-enhancing state of affairs. It can, *inter alia*, allow the diffusion of best practices among businesses and provide undertakings with valuable tools to handle unstable demand<sup>10</sup>. Also, in industries such as banking and the provision of insurance services, the sharing of information on consumer risks can mitigate exposure to adverse selection and moral hazard. "*In these circumstances, information sharing mechanisms fill an asymmetry of information about customers and thus allow the industry to operate efficiently*"<sup>11</sup>.

<sup>&</sup>lt;sup>7</sup> "[C]ommunication of information among competitors may constitute an agreement, a concerted practice, or a decision by an association of undertakings with the object of fixing, in particular, prices or quantities. Those types of information exchanges will normally be considered and fined as cartels. Information exchange may also facilitate the implementation of a cartel by enabling companies to monitor whether the participants comply with the agreed terms. Those types of exchanges of information will be assessed as part of the cartel." (Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 13, para. 58).

<sup>&</sup>lt;sup>8</sup> CAPOBIANCO A., Background paper, in OECD, Information Exchanges Between Competitors under Competition Law, 2010, pp. 21–22.

<sup>&</sup>lt;sup>9</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011.

<sup>&</sup>lt;sup>10</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 13 para. 57. As underlined by Whish, "[c]ompetitors cannot compete in a statistical vacuum: the more information they have about market conditions, the volume of demand, the level of capacity that exists in an industry and the investment plans of the rivals, the easier it is for them to make rational and effective decisions on their production and marketing strategies. Competitors may benefit, without harming their customers, by exchanging information on matters such as methods of accounting, stock control, book-keeping or the draftsmanship of standard-form contract" (WHISH R. BALEY D., Competition Law, 9<sup>th</sup> edition, 2018, p. 552).

<sup>&</sup>lt;sup>11</sup> CAPOBIANCO A., Background paper, in OECD, Information Exchanges Between Competitors under Competition Law, 2010, p. 25.

Such positive judgement can, however, be reversed when information sharing gives rise to (i) a collusive outcome or (ii) an anticompetitive foreclosure.

A collusive outcome arises when, "[b]y artificially increasing transparency in the market, the exchange of strategic information can facilitate coordination [...] of companies' competitive behaviour and result in restrictive effects on competition"<sup>12</sup>. This is notably the case

- 1. when the information exchange makes it possible to reach a collusive outcome<sup>13</sup>;
- when the information exchange serves as a tool for monitoring deviations by individual companies from a collusive practice, to allow other participants to punish them in a timely and effective manner thereby improving the *internal stability of the collusion*<sup>14</sup>;
- 3. when the information exchange allows the parties to the exchange information to collectively target the new entrants, so as to reinforce the *external stability of the collusion*<sup>15</sup>.

As to the anticompetitive foreclosure, it constitutes a competition concern "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"<sup>16</sup>.

While the analysis of whether competition has been harmed is highly case-specific, the Commission has identified two elements of particular relevance for the application of Article 101 (1) TFEU. First, due regard should be given to the market characteristics: companies are more likely to reach an anticompetitive collusive equilibrium in markets that are sufficiently (i) transparent, (ii) concentrated, (iii) non-complex, (iv) stable and (v) symmetric<sup>17</sup>. This is mainly due to the fact that, in those scenarios, they can reach an accurate understanding on the terms of coordination. Also, in such markets, the parties to the collusion can effectively monitor and punish deviations<sup>18</sup>.

Secondly, according to the Commission, the type of information exchanged, and the terms of the exchange may be equally crucial. Notably, only the sharing of selected types of information can increase the level of market transparency by reducing market complexity, mitigating demand instability or compensating for asymmetry<sup>19</sup>. In other words, the characteristics of the information exchanged are equally relevant because they can *change* initial market conditions in a way that is favourable for putting in place conducts of the kind covered by Article 101 (1) TFEU. *Inter alia*, the Commission highlighted exchanges regarding strategic information and individualised (i.e. non aggregated) market data as particularly dangerous for competition<sup>20</sup>.

<sup>&</sup>lt;sup>12</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 15 para. 65.

<sup>&</sup>lt;sup>13</sup> Ibidem, p. 15 para. 66.

<sup>&</sup>lt;sup>14</sup> Ibidem, p. 15 para. 67.

<sup>&</sup>lt;sup>15</sup> Ibidem, p. 15 para. 68.

<sup>&</sup>lt;sup>16</sup> Ibidem, p. 15 para. 70.

<sup>&</sup>lt;sup>17</sup> Stability and symmetry refer to the market shares of the undertakings that are active on that market.

<sup>&</sup>lt;sup>18</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 17-19 para. 77-85.

<sup>&</sup>lt;sup>19</sup> Ibidem, p. 17 para. 77.

<sup>&</sup>lt;sup>20</sup> Concerning the characteristics of the information exchange that the Commission highlighted as relevant for the purpose of Article 101 TFEU enforcement, see Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, pp. 19-21, para. 86-94.

#### 2.1.2 The case law of the CJEU

By including in the Guidelines the theories of harm illustrated above (collusion and anticompetitive foreclosure), the Commission manifested its intention to align its practice to the most widely recognised economic models regarding the antitrust analysis of information exchanges between competitors. However, as will be illustrated in this section, the case law of the CJEU, which the Guidelines were supposed to codify, seems to point in another direction.

Indeed, the CJEU does not consider any of the above theories of harm as crucial for establishing whether Article 101 (1) TFEU applies. This can be demonstrated by an analysis of the seminal case on horizontal information sharing, *John Deere*<sup>21</sup>, and the subsequent case law.

#### 2.1.2.1 John Deere

In John Deere, the CJEU was called to review the Commission's decision qualifying as anticompetitive an information exchange system established by a group of British tractor manufacturers. The system aimed at pooling data held by the United Kingdom Department of Transport relating to registrations of agricultural tractors. The decision was the first in which the Commission prohibited an information exchange system that concerned sufficiently homogeneous products, did not directly target the prices of those products and was conceived as a stand-alone practice<sup>22</sup>.

The General Court acknowledged the validity of the Commission's finding of anti-competitive practice based on the consideration of

- the constant oligopolistic nature of the tractor manufacturing market, characterised by high barriers to entry (notably, it was to a large extent closed to imports from outside the EU)<sup>23</sup>;
- the type of information exchanged (i.e. sales made in the territory of each of the dealerships in the distribution network), which the General Court considered business secrets<sup>24</sup>;
- the disaggregated and extremely detailed level of the information exchanged, allowing participants to trace back the individual sales<sup>25</sup>.

The judges then concluded that "general use, as between main suppliers and, contrary to the applicant's contention, to their sole benefit and consequently to the exclusion of the other suppliers and of consumers, of exchanges of precise information at short intervals, identifying registered vehicles and the place of their registration is, on a highly concentrated oligopolistic market such as the market in question and on which competition is as a result already greatly reduced and exchange of information facilitated, likely to impair substantially the competition which exists between traders. In such circumstances, the sharing, on a regular and frequent basis, of information concerning the operation of the market has the effect of periodically revealing to all the competitors the market positions and strategies of the various individual competitors"<sup>26</sup>.

As may be observed above, albeit relying on extremely telling circumstances as to the existence of an anticompetitive agreement, the theory of harm guiding the General Court was that of the *reduction of uncertainty*: the reasoning of the judges was indeed centred on the idea that the erosion of uncertainty

<sup>&</sup>lt;sup>21</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259.

<sup>&</sup>lt;sup>22</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 51.

<sup>&</sup>lt;sup>23</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 78-79.

<sup>&</sup>lt;sup>24</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 81.

<sup>&</sup>lt;sup>25</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 92.

<sup>&</sup>lt;sup>26</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 51.

characterising the respective course of action of the competitors on the market (also known as *"softening of competition"*) was *per se* unlawful.

Economic literature, which has taken into consideration the softening of competition as a theory of harm, concludes that uncertainty can be harmful for competition depending on (i) the type of uncertainty, (ii) the type of competition (whether on price or on quality) and (iii) the firm's individual expectation<sup>27</sup>. This means that no conclusions as to the effect on competition – and hence the antitrust analysis – can be drawn from the mere reduction of uncertainty *per se*. By failing to distinguish between reductions of uncertainty which have pro-competitive improvements and those which amount to anticompetitive collusion, the Court's theory of harm fails to answer the fundamental question that any information exchange poses to antitrust authorities, that is whether the exchange harms competition.

It should be underlined that the uncertainty as to the real implications of the softening of competition is even more intense in cases of information exchange agreements that are not part of a wider cartel. Indeed, in those cases the analysis is complicated by the need to grasp the economic rationale and effects of the information exchange itself, which is arguably a difficult task.

The parties to the John Deere agreement contested the General Court's interpretation, pointing out in their appeal that "the fact that an information exchange system lessens uncertainty is not sufficient for it to be considered to be restrictive of competition"<sup>28</sup>. The Court, however, rejected the argument by stating that, "although it is correct to say that this requirement of independence does not deprive traders of the right to adapt themselves intelligently to the existing or anticipated conduct of their competitors, it does [...] strictly preclude any direct or indirect contact between such traders, the object or effect of which is to create conditions of competition which do not correspond to the normal conditions of the market in question, regard being had to the nature of the products or services offered, the size and number of the undertakings and the volume of the said market"<sup>29</sup>.

This statement, that is systematically quoted in subsequent case law, in fact seems to be a tautology as nobody is in a position to assess what the "normal conditions of the market" actually are<sup>30</sup>. It must, however, be observed that, in order to validate the General Court's reasoning, the Court seemed to rely mainly on the factual circumstances surrounding the coordinated conduct as highlighted in the judgment under appeal. Notably, it referred to the confidential and disaggregated nature of the information exchanged, the frequency and systematic character of the exchanges as well as their being

<sup>&</sup>lt;sup>27</sup> BENNET M., COLLINS P., *The Law and Economics of Information Sharing: the Good, the Bad and the Ugly*, European Competition Journal, vol. 6, n. 2, 2010, p. 326.

<sup>&</sup>lt;sup>28</sup> Judgement of 28 May 1998, Deere v Commission, C-7/95 P, EU:C:1998:256, para. 82.

<sup>&</sup>lt;sup>29</sup> Judgement of 28 May 1998, Deere v Commission, C-7/95 P, EU:C:1998:256, para. 87.

<sup>&</sup>lt;sup>30</sup> According to economic theory, the answer to this question relies on the correct identification of the so called "Nash Equilibrium", i.e. "a strategy combination such that no firm has an incentive to change a strategy it is currently using given that no other firm changes its strategy" (HEIMLER A., The legal significance of economic evidence in antitrust cases: some comments based on the Italian experience, in OECD, Information Exchanges Between Competitors under Competition Law, 2010, pp. 400-401). Any collective market conduct that pushes its participants towards such equilibrium is competitive, whereas any coordinated practice to move away from it and to establish an alternative equilibrium can be qualified as an Article 101 TFEU infringement. However, since the Nash model is silent about how this equilibrium is reached and no economic model has been elaborated as to how to solve this issue, we do not dispose as of today of any scientifically sound theoretical tool to distinguish an anticompetitive equilibrium from a competitive one. As a consequence, a coordinated market conduct could be an intelligent adaptation to the business context, with a view of achieving the Nash Equilibrium, as well as an anticompetitive collusion to alter the Nash Equilibrium (Ibidem, pp. 401-403).

to the exclusive advantage of the producers<sup>31</sup>.

The legal test elaborated in *John Deere* was later applied by the CJEU to other Commission decisions where permanent information exchange systems were found to infringe Article 101 (1) TFEU.

#### 2.1.2.2 Thyssen

In the *Thyssen* case, the Commission fined a group of steel producers and one of their trade associations for having exchanged confidential information on the market for beams. The General Court, called to review the decision, started its analysis by observing that the Treaty provision setting forth the prohibition of anticompetitive collective conduct<sup>32</sup> was meant to enable every trader to determine independently the policy which he intended to follow on the common market<sup>33</sup>. According to the judges, this was not the case due to the characteristics of the information exchange that had taken place between steel beam producers. Notably, the following elements were mentioned as particularly relevant for the antitrust assessment:

- the detailed nature of the information exchanged<sup>34</sup>;
- the fact that such information was constantly updated and frequently sent out<sup>35</sup>;
- the closed circle of subjects having access to such information and the fact that this circle was
  exclusively made up of manufacturers, to the exclusion of consumers and other competitors<sup>36</sup>;
- the homogenous character of the products on which information was exchanged<sup>37</sup>;
- the oligopolistic structure of the market<sup>38</sup>.

This led the General Court to conclude that the arrangements in question clearly affected the participants' decision-making independence and were hence in violation of competition law<sup>39,40</sup>.

#### 2.1.2.3 Asnef-Equifax

The Asnef-Equifax case concerned the compatibility with Article 101 (1) TFEU of an online register established by an association of financial institutions, whose purpose was "to provide solvency and credit information through the computerised processing of data relating to the risks undertaken by participating organisations engaging in lending and credit activities"<sup>41</sup>. The case was referred to the Court for a preliminary ruling.

<sup>&</sup>lt;sup>31</sup> Judgement of 28 May 1998, Deere v Commission, C-7/95 P, EU:C:1998:256, para. 89.

<sup>&</sup>lt;sup>32</sup> Note that in that case the relevant provision was Article 65 (1) of the ECSC Treaty.

 <sup>&</sup>lt;sup>33</sup> Judgement of 11 March 1999, Thyssen Stahl v Commission, T-141/94, EU:T:1999:48, para. 393.
 This statement is based on a consolidated understanding of the rationale behind all Treaty provisions on competition (see judgement of of 16 December 1975, Suiker Unie and Others v Commission, C-40/73, EU:C:1975:174, para. 174).

<sup>&</sup>lt;sup>34</sup> Judgement of 11 March 1999, Thyssen Stahl v Commission, T-141/94, EU:T:1999:48, para. 394.

<sup>&</sup>lt;sup>35</sup> Judgement of 11 March 1999, Thyssen Stahl v Commission, T-141/94, EU:T:1999:48, para. 395-397.

<sup>&</sup>lt;sup>36</sup> Judgement of 11 March 1999, Thyssen Stahl v Commission, T-141/94, EU:T:1999:48, para. 398.

<sup>&</sup>lt;sup>37</sup> Judgement of 11 March 1999, Thyssen Stahl v Commission, T-141/94, EU:T:1999:48, para. 399.

<sup>&</sup>lt;sup>38</sup> Judgement of 11 March 1999, Thyssen Stahl v Commission, T-141/94, EU:T:1999:48, para. 400.

<sup>&</sup>lt;sup>39</sup> Judgement of 11 March 1999, Thyssen Stahl v Commission, T-141/94, EU:T:1999:48, para. 401.

<sup>&</sup>lt;sup>40</sup> The Court later validated the judgement, pointing out that an information exchange system may constitute a breach of competition rules even where the relevant market is not a highly concentrated oligopolistic market. According to the judges, only a truly atomised market supply would rule out the possibility of applying Article 101 (1) TFEU (judgement of 2 October 2003, Thyssen Stahl v Commission, C-194/99 P, EU:C:2003:527, para. 86).

<sup>&</sup>lt;sup>41</sup> Judgement of 23 November 2006, ASNEF-EQUIFAX, C-238/05, EU:C:2006:734, para. 7.

After quoting the *John Deere* case law, the Court stated that the compatibility of the information exchange system at hand with the TFEU could not be assessed in the abstract, i.e. by object<sup>42, 43</sup>.

On the contrary, the judges highlighted that agreements of the kind pursue in principle a procompetitive aim. On the one hand, they allow a more accurate assessment of the risk of borrower default by financial institutions, so that that their improved efficiency can translate into cheaper credit for customers. On the other hand, by lessening the importance of the information retained by credit institutions about their own customers, they increase the mobility of customers and decrease the barriers to entry for potential competitors<sup>44</sup>.

While this excludes agreements of this kind from ever qualifying as "by object" infringements, their antitrust review must encompass an accurate assessment of their economic and legal context to grasp their true economic rationale. This requires the antitrust authorities to consider:

- the level of concentration of the relevant market<sup>45</sup>;
- whether the information exchange directly or indirectly discloses the identity of lenders, as this would inevitably signal the commercial strategy of competitors<sup>46</sup>;
- whether such registers are open to all undertakings active in the relevant markets<sup>47</sup>.

When the market is not oligopolistic, or when the identity of the lenders is impossible to track and all undertakings active in the relevant market can assess the data, the Court thinks that "an information exchange system such as the register is not, in principle, liable to have the effect of restricting competition within the meaning of Article [101 (1)] TFEU"<sup>48</sup>.

#### 2.1.3 The legal test for applying Article 101 (1) TFEU: a tentative summary

Finally, a few conclusions can be drawn from the above analysis of the case law concerning information sharing systems between competitors. First, the theory of harm consistently referred to by the case law is of very little use in telling pro-competitive from anticompetitive information sharing arrangements. It basically proposes to rely on whether the market conditions that the arrangement leads to are comparable or more pro-competitive than competitive equilibrium. In so doing, it disregards that nobody knows where such equilibrium lies. In this sense, it must also be underlined that there is a fundamental divergence between the analytical model proposed by the Guidelines and that proposed by the case law of the CJEU when it comes to defining a theory of harm.

Secondly, the CJEU tends to base its analysis on the existence of the following indicators of anticompetitiveness:

<sup>&</sup>lt;sup>42</sup> Judgement of 23 November 2006, ASNEF-EQUIFAX, C-238/05, EU:C:2006:734, para. 54.

<sup>&</sup>lt;sup>43</sup> "Restrictions of competition by object are those that by their very nature have the potential to restrict competition within the meaning of Article 101(1)", so that "[i]t is not necessary to examine the actual or potential effects of an agreement on the market once its anticompetitive object has been established" (Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 8 para. 24). Instead, "[i]f a horizontal co-operation agreement does not restrict competition by object, it must be examined whether it has appreciable restrictive effects on competition" (Ibidem, p. 8, para. 26).

<sup>&</sup>lt;sup>44</sup> Judgement of 23 November 2006, ASNEF-EQUIFAX, C-238/05, EU:C:2006:734, para. 55-56.

<sup>&</sup>lt;sup>45</sup> Judgement of 23 November 2006, ASNEF-EQUIFAX, C-238/05, EU:C:2006:734, para. 58.

<sup>&</sup>lt;sup>46</sup> Judgement of 23 November 2006, ASNEF-EQUIFAX, C-238/05, EU:C:2006:734, para. 59.

<sup>&</sup>lt;sup>47</sup> Judgement of 23 November 2006, ASNEF-EQUIFAX, C-238/05, EU:C:2006:734, para. 60.

<sup>&</sup>lt;sup>48</sup> Judgement of 23 November 2006, ASNEF-EQUIFAX, C-238/05, EU:C:2006:734, para. 61.

- the oligopolistic nature of the relevant market;
- the homogeneous/heterogeneous character of the products or services marketed there;
- the level of detail of the information exchanged;
- the frequency and accuracy of the exchange;
- the type of information exchanged;
- the level of openness of the information exchange to other competitors and consumers.

Given their similarity with the indicators for the finding of an antitrust infringement as elaborated by the Commission in its Guidelines, it can be said that the strong reliance of the judges on such elements mitigates the divergence between the theoretical model reflected by the case law and the one set forth by the Guidelines.

# **2.2** Data pooling under Article 101 (1) TFEU: the differences with respect to the information sharing antitrust review

The application of Article 101 (1) TFEU to data pools may certainly gain a lot from the approach taken by antitrust practice and case law on information exchanges. Notably, the concentration of the relevant market and the level of openness of the exchange will play an equally valuable role in the antitrust assessment of data pools as they did in reference to information sharing systems.

The same may be said of the qualification of data pools as "by effect" rather than "by object" restrictions. Based on the *Asnef-Equifax* judgement, it is safe to say that they are unlikely to fall in the latter category, given their allegedly pro-competitive purpose. This is all the more true for data exchanges that, like the one in *Asnef-Equifax*, address information asymmetry and moral hazard issues and are supposed to translate into tangible price benefits for consumers.

Difficulties in the application of the above criteria arise when considering the characteristics of the data – as opposed to information – which is subject to the exchange.

In its Guidelines, the Commission made reference to data and information as if they were the same thing. For example, according to the Guidelines, "[t]*he exchange between competitors of strategic* <u>data</u>, that is to say, <u>data</u> that reduces strategic uncertainty in the market, is more likely to be caught by Article 101 than exchanges of other types of <u>information</u>"<sup>49</sup>.

The assessment of the strategic nature of information shared by participants in the exchange system is clearly relevant for the antitrust assessment of collective business conduct because it affects *""the parties' decision-making independence by decreasing their incentives to compete"*<sup>50</sup>. There are, however, substantial differences between data and information that are relevant for such analysis and should not be overlooked.

Accordingly, the question of how the guidelines elaborated by the Commission and the case law of the CJEU will apply to the antitrust analysis of data pools faces at least two substantial problems, which will be addressed below.

<sup>&</sup>lt;sup>49</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 19, para. 86.

<sup>&</sup>lt;sup>50</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 19, para. 86.

#### 2.2.1 When does data constitute information?

There is no accepted definition of "data".<sup>51</sup> It may be characters, character strings, indications, (numerical) values or findings and can be obtained in many ways (e.g. by measurement or observation). Its features vary according to its source (e.g. private digital behaviour, mandatory reporting to authorities, corporate processes or machine), quality (data may be standardised and comparable or very unclean) and use.

What we know for sure is that data is a factor of production in producing information<sup>52</sup>. Indeed, for the data economy, it is not data as such that is important, but the information that can be derived out of it. The expression 'information good' is often used to describe this, indicating the information that can be derived from data as a valuable asset.<sup>53</sup>

The differences between data and information have an impact on the way data and information is pooled. Unlike information, data is pooled as soon as it is produced. Since it is not selected and aggregated for the purpose of pooling, as is the case for traditional business information, it does not intrinsically convey any specific business view or project and is also open to many interpretations. Also, such pooling is supposed to be completely automatic.

This being the case, the application of Article 101 (1) TFEU raises the question, under which conditions can data amount to information for the purpose of antitrust analysis.

It could be argued that data needs *framing* to become information. Such "framing" can be defined as the existence of the necessary conditions required for market operators to grasp the meaning of raw data for their business reality.

In this regard, we can imagine two scenarios. In the first scenario, the data exchange system is complemented by the joint use by data poolers of a common technology that builds up predictive models (i.e. an artificial intelligence tool). In this case, data substantially amounts to information because every data pooler is equally able to decrypt the data, i.e. to extract the same business information out of it.

In the second scenario, data poolers do not use a common technology. The pooling of data only equates to an exchange of information in so far as the economic or legal context provides useful elements in this sense. While this analysis is extremely fact-specific, the likelihood that a framing effect can be produced is higher when markets are oligopolistic or when the participants of the pooling are active in the same market.

## **2.2.2** Data is not (always) information: the impact of this difference on the antitrust assessment of data pools.

Excluding the scenario where all competitors rely on the same technology to decrypt data and transform it into information, the fact that data can equate to information does not mean that it will.

<sup>&</sup>lt;sup>51</sup> An article by Zins identified 130 definitions of data, information, and knowledge in 2007. See Zins, C. (2007), Conceptual approaches for defining data, information, and knowledge, Journal of the American society for information science and technology 58.4: 479-493.

<sup>&</sup>lt;sup>52</sup> Jones, C. and Tonetti C. (2018), Nonrivalry and the Economics of Data, 2018 Meeting Papers. Vol. 477. Society for Economic Dynamics

<sup>&</sup>lt;sup>53</sup> Anzini M., Eckhardt P., Pierrat A., Van Roosebeke B., European Leadership in the Digital Economy, cepStudy, forthcoming.

In fact, not every data pooler is equally able to effectively frame data, as its expertise in data-mining could be low or substantially lower than the other parties to the pooling.

This circumstance is crucial for our analysis, as it affects the ability of each participant to grasp information from the data and thus to adjust its own behaviour accordingly, as is required for Article 101 (1) TFEU to apply. Does this mean that the Commission should take into consideration the data savviness of each undertaking while applying Article 101 (1) TFEU?

Besides the extreme complexity of this test and the doubts that may be raised about its technical feasibility by competition authorities, speculation about the subjective perspectives of undertakings should not be relevant under Article 101 TFEU: instead, a sound economic approach should suggest reliance on an objective evaluation of the effects of the conduct on the market.

In this sense, three analytical approaches can be taken into consideration. First, the antitrust authority could use a "paradigmatic data pooler" for its assessment. Such a data pooler is provided with average data mining abilities, taking into account the level of technological advancement and the most widespread technologies in the relevant sector. The task of the authority would then be to check if such a paradigmatic data pooler is able to translate data into information.

Secondly, the antitrust authority could identify a statistical threshold for the likelihood of data to be actually turned into specific information, whose spread among competitors is suspected to qualify as a restriction of competition under Article 101 (1) TFEU. If, in a given case under investigation, this statistical probability exceeds this threshold, it could justify antitrust enforcement.

Thirdly, an additional model is possible which constitutes just a different version of the second. Notably, according to this analytical model, antitrust enforcement could be justified when (i) the statistical probability of extracting relevant information from data exceeds the threshold and (ii) concrete, additional elements support the result of the assessment under (i). By way of example, we could imagine a simplified scenario in which only two companies pool data. Assume that company A, in addition to pooling data, accepted to regularly pay sums of money to its competitor and fellow data pooler, company B. These terms of the agreement establishing the data pool suggest that company A is conscious of the value attached to the data pooled by company B. Accordingly, this element should be taken into consideration when assessing to what extent the data pool amounts to an information sharing system.

### 3 The countervailing efficiencies test under Article 101 (3) TFEU

### 3.1 The four conditions of the test

Once a restriction of competition has been recognised under Article 101(1) TFEU, the anticompetitive practice may still be found to be in compliance with competition law if all of the four conditions set forth by Article 101(3) TFEU are met<sup>54</sup>.

First, according to Article 101 (3) TFEU, the anticompetitive agreement must contribute to "improving

<sup>&</sup>lt;sup>54</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 7, para. 42. The CJEU also stressed in a number of occasions that such conditions are cumulative (see e.g. Joined Cases 43/82 and 63/82, VBVB and VBBB v Commission [1984] ECR 19, para. 61, and Remia and Others v Commission, para. 38).

the production or distribution of goods or to promoting technical or economic progress". This means that the agreement must produce the so-called "efficiency gains", which must outweigh its anticompetitive effects<sup>55</sup>. If the agreement has effects on more than one market, as may be the case when parties to the agreement are active on two-sided markets, the objective benefits in each of these markets must be taken into account for the assessment.

Secondly, the restriction of competition resulting from the agreement must be indispensable in order to achieve the efficiencies.

Thirdly, the efficiency gains following from the agreement must be passed on to consumers to an extent that outweighs the anticompetitive effects caused by the information exchange. According to the Commission guidelines on Article 101 (3), the term "consumers" designates here all direct and indirect users of products covered by the agreement<sup>56</sup> – e.g. producers and final consumers. The overall effect on all the consumers in the relevant markets is taken into account, and each group of consumers affected needs to get a fair share of the benefits. A balancing test will be carried out between the restriction on competition and the pass-on to consumers: the greater the restriction, the greater the efficiencies and the pass-on to consumers must be.

Fourthly, under no circumstances can the agreement enable the companies concerned to eliminate competition for a substantial part of the products concerned. In assessing if the agreement could lead to an elimination of competition, both actual and potential competition in the market must be considered, taking account of the barriers to market entry<sup>57</sup>.

Therefore, if a coordinating practice is found to be anticompetitive under Article 101 (1) TFEU, the undertaking(s) concerned can invoke the exemption of Article 101 (3) TFEU and present evidence to show that it fulfils the four cumulative conditions<sup>58</sup>.

This is likely to happen in the case of data pools because, as the Commission itself recognised,<sup>59</sup> they often have pro-competitive effects. The assessment under Article 101 (3) TFEU for data pooling might, however, give rise to difficulties which will be dealt with below.

#### 3.2 Data pools and efficiency gains

The ability of the anticompetitive agreement to improve the production or distribution of goods or to contribute to technical or economic progress is at the centre of the test under Article 101 (3) TFEU. The assessment of such efficiency gains must address:

- the nature of the claimed efficiencies, which must be objective;
- the link between the restrictive agreement and the efficiencies, which must be direct;
- the value of the claimed efficiencies, i.e. their likelihood and magnitude;

<sup>&</sup>lt;sup>55</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 6, para. 33.

<sup>&</sup>lt;sup>56</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 13, para. 84.

<sup>&</sup>lt;sup>57</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 17-18, para. 108 and 114.

<sup>&</sup>lt;sup>58</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 7, para. 41.

<sup>&</sup>lt;sup>59</sup> European Commission, Antitrust: Commission opens investigation into Insurance Ireland data pooling system, Press Release, Brussels, 14 May 2019, accessible at <u>https://europa.eu/rapid/press-release IP-19-2509 en.htm</u>

- how and when the achievement of the said efficiencies is supposed to take place<sup>60</sup>.

The CJEU has emphasised that anticompetitive agreements can only be said to produce efficiencies when they "show appreciable objective advantages of such a character as to compensate for the disadvantages which they cause in the field of competition"<sup>61</sup>. The objective approach taken by the CJEU means that efficiencies cannot be assessed from the subjective point of view of the parties to the agreement. Nor can they consist of mere expectations.

This could prejudice the application of Article 101 (3) TFEU to data pools. Indeed, while pooling data between companies may be likely to lead to innovation, this innovation – e.g. the introduction of new products or new services/the improvement of existing ones – is unpredictable and not yet observable at the moment of the data pooling. This makes the identification of the relevant efficiencies impossible and prevents authorities from assessing whether they are capable of outweighing the restrictive effects of the agreement.

Instead, when the data pooled concerns information on consumers' defaults and risk characteristics, as is common in the banking and insurance sector, the efficiencies resulting from the agreement are clearer. Pooling data in this regard can notably create an incentive for consumers to limit their risk exposure, allow better prices for lower risk consumers and reduce consumer lock-in by facilitating the switch from one company to another<sup>62</sup>.

Therefore, the first and central condition of Article 101 (3) TFEU regarding efficiency gains might be problematic in the case of data pooling.

#### 3.3 Data pools and the indispensability requirement

The indispensability requirement under Article 101 (3) TFEU is subject to a two-fold test. It must be established (i) whether the restrictive agreement in itself is reasonably necessary to attain the efficiencies and (ii) whether each restriction of competition resulting from the agreement is reasonably necessary to attain the efficiencies<sup>63</sup>.

Hence, the indispensability of the agreement and the individual restrictions must be ascertained through a counterfactual analysis. First, the agreement is only indispensable if in its absence there would be no other ways, which are economically practicable and less restrictive, to attain the efficiencies<sup>64</sup>. Secondly, it must be demonstrated that the absence of the restrictions to competition arising from the coordinated practice would eliminate or significantly reduce the efficiencies or make them significatively less likely to materialise<sup>65</sup>.

The CJEU examined the applicability of the indispensability condition to an information exchange

<sup>&</sup>lt;sup>60</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 9, para. 51 to 58.

<sup>&</sup>lt;sup>61</sup> Judgment of the Court of 13 July 1966, Consten and Grundig v Commission, C-56/64 and 58/64, ECLI:EU:C:1966:41, p. 348.

<sup>&</sup>lt;sup>62</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 21, para. 97.

<sup>&</sup>lt;sup>63</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 11, para. 73-74.

<sup>&</sup>lt;sup>64</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 12, para. 75.

<sup>&</sup>lt;sup>65</sup> Communication from the Commission – Notice – Guidelines on the application of Article 81 (3) of the Treaty, OJ C 101, 27.4.2004, p. 12, para. 79.

system in *John Deere*<sup>66</sup>. In that case, the General Court reviewed, *inter alia*, the Commission's refusal to apply Article 101 (3) TFEU. The Commission considered that the information exchange was not indispensable since the pro-competitive benefits "can be derived from own company and aggregate industry information"<sup>67</sup>. The applicants contested the Commission's assessment in front of the General Court by stating that the restriction of competition arising from the information exchange system was indispensable as "in the absence of such an exchange system it would [have been] possible to gather the information only at a much higher cost and it would [have] therefore [been] available only to large undertakings"<sup>68</sup>.

The General Court validated the Commission's approach<sup>69</sup>. It considered that (i) the restrictions were not indispensable since "own company data and aggregate industry data [were] sufficient to operate in the agricultural tractor market in the United Kingdom"<sup>70</sup> and (ii) the argument regarding the impossibility of obtaining this information at the same cost by other means was irrelevant because the information otherwise obtained "would [have been] in particular out of date, isolated and not as frequent as the information provided by the system at issue"<sup>71</sup>.

This second point of the General Court seems rather formalistic. The fact that information obtained through market research is out of date and isolated by comparison with that obtained through the information exchange system did not lead the General Court to argue that the system was indispensable. Instead, the General Court observed that, because the information gathered through the other means was not equivalent to that pooled in the system, the argument submitted by the applicants concerning the higher cost of the alternative to the system deserved no further consideration.

In any case, according to the John Deere case, two elements should be emphasised when assessing the indispensability of exchanging information to achieve efficiency gains:

- The exchange of aggregate industry data is more likely to be recognised as producing procompetitive effects, whereas the necessity of detailed individual information will be strictly reviewed by the CJEU.
- It seems that an alternative way to obtain the information at higher cost would be considered only if it provides information that is as relevant as the one accessed through the information exchange system.

The Commission's guidelines on Article 101 TFEU provide additional clarifications as to whether an information exchange system is indispensable. The guidelines point out that an information or data exchange system<sup>72</sup> is indispensable where the "data's subject matter, aggregation, age, confidentiality and frequency, as well as coverage of the exchange are of the kind that carries the lowest risks

<sup>&</sup>lt;sup>66</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259.

<sup>&</sup>lt;sup>67</sup> Commission Decision of 17 February 1992 relating to a proceeding pursuant to Article 85 of the EEC Treaty, 92/157/EEC, para. 60.

<sup>&</sup>lt;sup>68</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 103

<sup>&</sup>lt;sup>69</sup> The Court then validated the General Court judgement regarding the indispensability of the information exchange system in Judgement of 28 May 1998, Deere v Commission, C-7/95 P, EU:C:1998:256, para. 122-128.

<sup>&</sup>lt;sup>70</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 105.

<sup>&</sup>lt;sup>71</sup> Judgement of the 27 October 1994, Deere v Commission, T-35/92, EU:T:1994:259, para. 105.

<sup>&</sup>lt;sup>72</sup> The Commission does not distinguish between "information" and "data" in its guidelines.

indispensable for creating the claimed efficiency gains"<sup>73</sup>. More specifically, the exchanges carrying the lowest risk concern: aggregated data as opposed to company level data<sup>74</sup>; historic data rather than current data<sup>75</sup>; public data as opposed to confidential data, i.e. data equally accessible regarding the costs of access to all competitors and customers<sup>76</sup>.

As is also true for information exchanges, the analysis of the indispensability of data pools depends on the facts of the case. However, it can be assumed that the following issues will play a major role when assessing its indispensability.

While reviewing the indispensability requirement, regard should be had to the alternatives to data pooling: a data pool will only be considered indispensable if there are no other ways, which are economically practicable and less restrictive, to attain the efficiencies.

Considering the economically practicable alternatives to pooling data, it may be possible in some cases to collect the same data directly from customers. The antitrust authority will, however, need to determine whether (i) cost considerations or (ii) data protection issues make the buying/use of customer data a truly viable alternative for data poolers. Please note that the word "customer" in this context identifies natural persons as well as organisations of various kinds, institutions and undertakings, so that the legal issues that could arise when gathering data directly may be extremely varied in nature.

Given the characteristics of data and its pooling, therefore, it is very challenging to review the indispensability condition, potentially making it difficult for companies to invoke the applicability of Article 101 (3) TFEU.

### 4 Conclusions

Data pools are likely to become crucial for undertakings to improve their products and services as well as for allowing the establishment of aftermarkets. In this sense, they could prove useful both for market actors, who, unlike the few giants of the tech sector, are nowadays barred from accessing an adequate pool of data of their own, and for consumers, who might benefit from the related improvements and enjoy a wider offer of products and services.

Notwithstanding the benefits of data pools, data poolers risk being sanctioned by antitrust authorities, *inter alia*, because such arrangements could amount to an anticompetitive information sharing agreement between competitors. In this regard, we have underlined that this is only possible if (i) data can equate to information because of a special "frame" and (ii) the antitrust authority ascertains through a reliable model that all data poolers are able to transform the data into business information.

It should be recalled that, even when a data pool is recognised as infringing Article 101 (1) TFEU, data poolers can still invoke the application of Article 101 (3) TFEU. However, providing evidence of the alleged pro-competitive effects might be hard: notably, the affected undertakings would need to show

<sup>&</sup>lt;sup>73</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 22, para. 101.

<sup>&</sup>lt;sup>74</sup> in this respect, the nature of the market needs to be taken into consideration as well, especially where the market is oligopolistic. See Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 20, para. 89.

<sup>&</sup>lt;sup>75</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 20, para. 90.

<sup>&</sup>lt;sup>76</sup> Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2011, p. 20-21, para. 92.

the existence of actual efficiencies and the indispensability of the data pool to produce such efficiencies, which could prove overly difficult.

Finally, we support the Commission's initiative, spelled out in the Communication "A European Strategy for Data", to use the upcoming review of the Horizontal Cooperation Guidelines<sup>77</sup> to provide additional guidance on possible clashes between data pools and EU competition law.

<sup>&</sup>lt;sup>77</sup> Communication from the Commission — A European strategy for data, p. 14, COM(2020) 66, accessible at: <u>https://ec.europa.eu/info/publications/communication-european-strategy-data en</u>

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