Submission to the Consultation on the CNMC Second Draft Damages Guide

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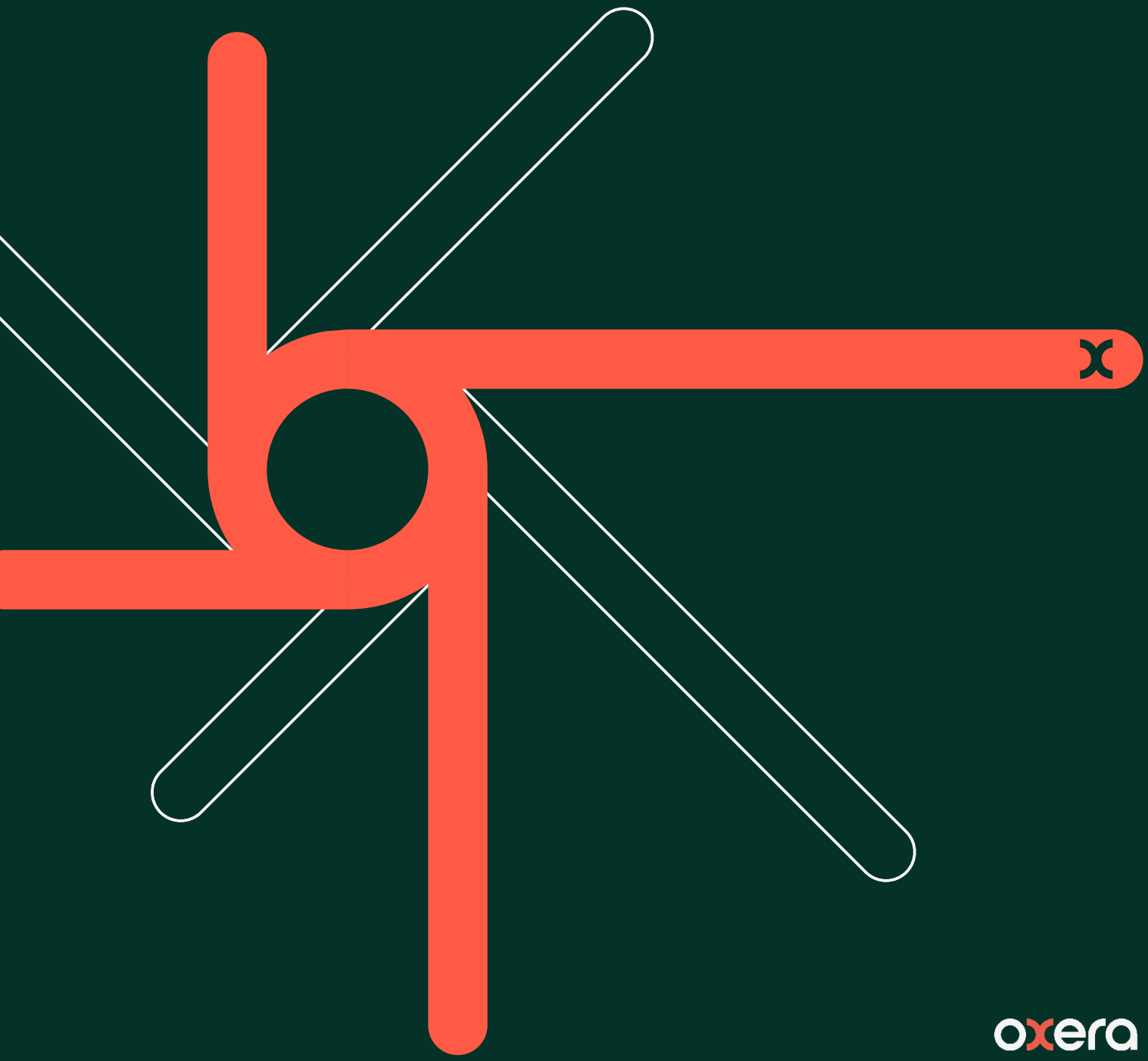
Prepared for the CNMC

22 November 2022



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1 Introduction

1.1 Summary and outline

1.1 This note is prepared in response to the public consultation made by the Spanish National Commission of Markets and Competition ('CNMC') on the Second Draft Guide on Damages Quantification in Competition Infringements ('Second Draft').[1]

1.2 We consider that the Second Draft has valuable additions to the first draft published by the CNMC ('First Draft'). It provides a more developed framework for judges, courts, lawyers and economists ('Practitioners') to implement and assess quantitative analyses in damages procedures. It is well-structured, thorough and accessible to a non-economic audience while not compromising on academic rigour. The inclusion of a practical example and a checklist has helped make the guidance more practical and specific.[2] The further inclusion of i) an added emphasis on the need for case-specific estimations, ii) the introduction of a need for a theory of harm, iii) an adjustment of some econometric and statistical technical concepts, are welcome, being potential improvements we identified in respect of the First Draft.

1.3 The Second Draft also contains an excellent overview of the process and methods of damages quantification as well as references to the key points of the European Commission's Practical Guide ('EC Practical Guide'),[3] the European Commission's Guidelines for national courts on how to estimate pass-on to indirect purchasers,[4] and our 2009 report prepared for the DG Competition of the European Commission ('Oxera 2009 Study').[5] Such re-affirmation of the core principles of damages quantification is well-timed due to the rapid increase of competition damages cases in Spain in recent years and the differential judicial views on expert evidence.

1.4 In this second consultation response we note some additions and clarifications which we consider would further enhance the practical value and impact of these guidelines:

- First, we suggest promoting best practice for the judicial management of the expert process to avoid cases where the estimations provided by both parties have relevant deficiencies. These include more extensive guidance on the value of the disclosure of data between parties and providing

[1] Comisión Nacional de los Mercados y la Competencia (2022), 'Guía sobre cuantificación de daños por infracciones del derecho de la competencia'.
[2] Comisión Nacional de los Mercados y la Competencia (2020), op. cit., paras 351–441.
[3] European Commission (2013), 'Commission Staff Working Document. Practical Guide. Quantifying Harm in Actions for Damages Based on Breaches of Article 101 or 102 of the Treaty on the Functioning of the European Union'.
[4] European Commission (2019), 'Guidelines for national courts on how to estimate the share of overcharge which was passed on to the indirect purchaser', 9 August.
[5] Oxera (2009), 'Quantifying antitrust damages: towards non-binding guidelines', Study prepared for the European Commission, December.

for the possibility of a court appointed expert (as far as Spanish laws and procedures allow).

- Second, we believe it would be beneficial for the Second Draft to provide further clarifications on the role and relevance of the theory of harm.
- Third, we consider it important to put further emphasis on the need for a case-specific assessment.
- Lastly, we provide some technical observations and suggestions with respect to the methodologies included the Second Draft's annexes.

1.2 About Oxera

1.5 Oxera is a leading economics consultancy with experts who specialise in the field of damages quantification. We produced the 2009 study on the quantifying of antitrust damages for the European Commission, which helped inform its 2013 practical guide to courts. We have provided Commission-sponsored training for national judges on this topic.

1.6 Oxera advises a wide range of diverse clients in competition damages matters in many jurisdictions across Europe and beyond, including in ongoing cases in Spain. We have acted as experts in court cases in Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, Spain and the UK. We act in others for defendants, in some cases for claimants and sometimes as court-appointed experts.

1.7 Oxera continues to contribute actively to European policy debates and the economic literature in the areas of competition law and damages. We have strong links with academia through our network of associates and the Oxera Economics Council, which regularly interacts with the European Commission.

1.8 We are currently advising both claimants and defendants in ongoing damages proceedings in Spain. Our response to this consultation is made on our own behalf and not as advisers in any ongoing cases.

2 Best practice for the judicial implementation and assessment of competition damage estimations

2.1 Introduction

2.1 The Second Draft contains important guidance to assist Practitioners in the implementation and assessment of damages estimations in the context of competition infringements. However, there may be some specific obstacles that Practitioners may encounter in this process, that we suggest addressing in the final CNMC Damages Guide.

2.2 The EC Practical Guide indicates that when different reports reach contradictory or significantly different results, it is not correct to take an average of the different estimations nor consider that contradictory results 'annul' each other. The advice is to carefully review the reasons for the divergence and consider the advantages and disadvantages of each report and their application to the case in review.[6] The Second Draft, following the Oxera 2009 study and others, includes similar advice. It offers two solutions to the case in which results from different reports show contradictory or substantially different results: (i) best model approach, (ii) pooling approach.[7]

2.3 Such approaches are appropriate solutions when courts face two or more contradictory or divergent estimations. Nevertheless, they do not cover the situation in which the estimations provided have methodological issues that make judges unable to reliably base their decisions on any of the estimates provided.

2.4 Misalignment or shortcomings in the expert estimates could be caused by a lack of access to data, or the use of contrasting and incompatible data sources. The Second Draft focuses primarily on the methodological and economic approaches to resolving such disparities.

2.5 However, in our experience many of the most beneficial means of resolving such issues are inherently practical matters of case management and/or procedure. Therefore, we pose the question as to whether the guidelines could go further on these aspects. We make two suggestions:

- first, the CNMC Damages Guide could include more guidance about the use of data rooms as a tool to assure effective access to data to all parties in the process (section 2.2);

[6] European Commission (2019), 'Guidelines for national courts on how to estimate the share of overcharge which was passed on to the indirect purchaser', 9 August, p. 125, and Juzgado de lo Mercantil N 1 de Oviedo, Case Nº 243/2022, 7 September 2022, para. 213.
[7] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 86.

- second, we suggest discussing the merits of the possibility of appointing a court expert in the CNMC Damages Guide (section 2.3).

2.6 The Second Draft already discusses these two points to some extent. It includes an overview of the many tools that judges can use to protect data confidentiality, without jeopardising the effective quantification of damages by the parties. These include redaction of information, allowing data rooms and the appointment of independent experts.[8] In this consultation, we aim to suggest including further details and recommendations to judges to ensure that they are able to best implement the range of tools proposed by the Second Draft. Additionally, implementing these suggestions will help to minimise the risk of judges not being able to rely on quantitative evidence due to parties presenting unreliable estimations.

2.7 Lastly, we note that, although the Second Draft mentions that quantitative estimations should be replicable,[9] it does not mention the inclusion of a 'data pack' on expert reports.[10] Based on our experience, it is very unlikely that an estimation would be able to be replicated only based on a description of the data-collection process.[11] Therefore, we suggest that the CNMC Damages Guide recommends that Practitioners attach to the expert's report a data pack in order to assure replicability.

2.2 Data rooms

2.8 Damages procedures are characterised by the existence of information asymmetries between the parties.[12] Usually, there is one party that has more available data than the other. For example, due to the complex and sometimes concealed nature of many competition law infringements, claimants are likely to have access to less information than defendants to estimate the effect of the conduct. On the contrary, to estimate pass-on, where this is raised as a defence, it is likely that defendants will have limited access to information on downstream prices formation in comparison to claimants.

2.9 This often results in disparities in data availability between the parties. By extension, it also implies that the outcomes of the analyses of the parties may differ substantially. Disclosure of relevant evidence between claimants and defendants is complicated by the fact, that many damages procedures deal with highly sensitive information. For this reason, the European Commission published its 2020 Notice on the protection of confidential information that provides guidance on the

[8] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., paras 44–50.
[9] CNMC (2022), op. cit., paras 52, 77 and 223.
[10] A collection of electronic documents which includes the dataset and the code used for preparing the dataset and performing the quantitative assessment.
[11] The Second Draft mentions that, for replicability purposes, it is recommendable that a report includes descriptive statistics about the data-collection process, sample characteristics and the data cleaning process to get the final dataset. Comisión Nacional de los Mercados y la Competencia (2022), op. cit., paras 76–77.
[12] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 32.

effective disclosure of information in damages proceedings ('Commission 2020 Notice').[13]

2.10 One of the measures proposed by the European Commission to effectively disclose sensitive information and data is the use of confidentiality rings. Confidentiality rings are defined as:[14]

> [...] a disclosure measure whereby the disclosing party makes specified categories of information, including confidential information, available only to defined categories of individuals.

2.11 'Data rooms' are a way of ensuring that the requirements of any confidentiality agreement are met by creating a physical or virtual environment where confidential information can be inspected and reviewed, but not removed. While the Second Draft mentions the possibility of using data rooms when disclosing information we consider additional guidance to help promote the practical implementation option where beneficial and efficient.

2.12 Since the Commission 2020 Notice contains a more detailed description of the precautions and logistics of the implementation of data rooms, we suggest to include a specific reference to the section of the Commission 2020 Notice to guide courts (i.e. section III.C of the Commission 2020 Notice).

2.13 The European Commission also published a document on 2020 about best practices on disclosure of information in data rooms in an antitrust procedure setting, many principles from which may be helpful in a litigation setting.[15] We consider that this would also be a useful reference to include in the CNMC Damages Guide.

2.14 Moreover, we consider that it would be helpful to include some additional comments with respect to 'virtual' data rooms. Although the Second Draft mentions these as an option,[16] it could be helpful to highlight the cost-reduction benefits of using virtual data rooms to provide access to data to parties, especially for the quantifications carried out by the parties' experts.

2.15 Finally, we observe that there are courts that have already issued detailed guidelines on the creation of data rooms. For instance, the Commercial Court of Barcelona published a protocol on the protection of business secrets in 2019 in which it determined that: [17]

[13] European Commission (2020), 'Communication on the protection of confidential information by national courts in proceedings for the private enforcement of EU competition law', 22 July.
[14] Ibid., para. 50.
[15] European Commission (2015), 'Best Practices on the disclosure of information in data rooms in proceedings under Articles 101 and 102 TFEU and under the EU Merger Regulation', 2 June.
[16] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 47.
[17] Tribunal Mercantil de Barcelona (2019), 'Protocolo de Protección del Secreto Empresarial en los Juzgados Mercantiles', 18 November, ch.5.5. Translation by Oxera.

> where the number of documents or information is very voluminous, the creation of a virtual Data Room, even with Blockchain technology, with access limited to the persons making up the circle of confidentiality, may be appropriate.

2.16 We consider it to be beneficial if the CNMC encouraged other courts to follow this practice. The standardisation of the process would help to resolve any ambiguities and, thereby, encourage judges to use data rooms more frequently, and therefore help ensure that misalignment in expert estimates resulting from access to different data sources is reduced.

2.3 Allow possibility of court-appointed expert

2.17 As mentioned above, the Second Draft refers to the possibility of appointing a court expert.[18] Although in many cases an estimation led and scrutinised by the parties' experts will be suitable, the option of a court-appointed expert can be a valuable option when the risk of expert divergence is high.

2.18 We do not discuss here the various advantages and disadvantages of having a court-appointed expert to work alongside the parties' experts. Nevertheless, we note that this option may present obstacles in the Spanish judicial system. For example, in the Commercial Court N 1 of Oviedo's decision in the damages claim against Volvo, in the context of the EU Trucks case, when neither claimant or defendant was able to provide a reliable estimation the judge explains that:[19]

> In this complex task the judge receives no help. We lack any regulatory guidance and the experts bury themselves in their respective opinions. We do not have a list of available experts and appointing a judicial expert, theoretically possible, becomes unfeasible in practice due to the lack of a judicial list of econometrical experts and the risk aversion of the parties, who prefer to trust everything to their respective experts.

2.19 Whether it is possible or not to appoint a court expert is outside of our area of expertise. However, where judges do face obstacles to appoint experts, we suggest that the CNMC explores in its damages guide or elsewhere how these difficulties can be overcome.

[18] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para 48.
[19] Juzgado de lo Mercantil N 1 de Oviedo, Case N 380/2020, 7 September 2022, para. 217. Translation by Oxera.

3 Clarifications on the need for a theory of harm

3.1 Changes in the Second Draft

3.1 As suggested by some participants of the first consultation (including ourselves), the Second Draft now includes guidance around the importance of a theory of harm to explain how the anticompetitive conduct leads to harm to the particular claimant. It also mentions that defendants have the possibility to show how a given theory of harm would *not* apply to the specific case, given the facts and relevant economic theory.[20]

3.2 We consider it economically important that, irrespective of whether the presumption of harm established in the 2014 EC Damages Directive applies or not, there is considerable value in claimants clearly explaining how the anticompetitive conduct harmed them. This allows for the design of empirical methods that are properly linked to the underlying mechanism of harm. It also allows defendants the possibility to present arguments specific to the mechanism relevant to a particular claim, and in this way helps judges to assess the economic expectation of harm in a given case.

3.3 In our first submission, we suggested that the CNMC Damages Guide could include a brief economic overview of the mechanisms relevant to horizontal coordination, based on the *Airtours* criteria, to help inform judges' assessment of this economic expectation of harm.[21]

3.4 We repeat this recommendation here. This is not to suggest that every claimant needs to individually demonstrate the *Airtours* criteria (or equivalent conditions) are met, or that a claim requires a precise description of how the alleged harm arose to be valid. In some cases multiple mechanisms will be at play, or the central mechanism will be clear based on the conduct itself (for example, where a tender for supply of services is rigged, the harm naturally arises through a less advantageous tender likely winning the auction) such that a full statement of the underlying mechanism to be tested would be impractical or unnecessary. Rather, the aim of the guidance should be to ensure courts have the relevant economic toolkit to engage with and manage any expert disagreement (when they arise) as to what mechanisms of harm could have operated. In so doing, courts will of course have to make allowance for any information asymmetry between the parties.

3.5 Such guidance could be included in an additional annex of the CNMC Damages Guide. Based on our experience of the content of current expert debates in damages litigation in Spain and elsewhere, we consider including a conceptual framework such

[20] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., paras 161–162.
[21] Oxera (2021), 'Submission to the Consultation on the CNMC Draft Damages Guide', submitted to the CNMC on 22 October 2021, section 4.

as the *Airtours* criteria could be of assistance in scrutinising and determining these debates.

3.6 In the remainder section we discuss other helpful clarifications related to the theory of harm in the context of a private damages cases that we consider to be potentially useful additions to the Second Draft. Specifically we discuss possible guidance in respect of:

- the different focus that public enforcement and private follow-on damages cases have (section 3.2);
- the relationship between the theory of harm and the presumption of harm in damages claims derived from a cartel conduct (section 3.3);
- the concept of a 'cartel', as well as the special case of a 'hardcore cartel' and how the distinction can assist the determination of damages cases (section 3.17).

3.2 Differences between focus of public enforcement and private follow-on damages cases

3.7 In this section we discuss the importance of highlighting the difference in focus between public enforcement and private damages cases. We focus in this section on follow-on damages actions which we understand are the vast majority in Spain.

3.8 Article 101 of the Treaty on the Functioning of the European Union ('Article 101') allows the prosecution of cartels by their object or their effect. [22] By-object restrictions are defined by the European Commission guidelines on the applicability of Article 101 to horizontal co-operation agreements (the 'Horizontal Guidelines') as those that 'by their very nature have the potential to restrict competition within the meaning of Article 101(1)', such as price fixing and market sharing.[23]

3.9 The main implication of this approach is that it is not required to review actual effects when prosecuting a cartel or other Article 101 infringement by its object. This necessarily means that it is possible (in principle at least) that an infringing conduct that is identified and sanctioned, does not have a material effect on the market. As mentioned in our first submission, Advocate General Kokott uses a simple metaphor to illustrate this possibility:[24]

> a person who drives a vehicle when significantly under the influence of alcohol or drugs is liable to a criminal or administrative penalty, *wholly irrespective* of whether, in fact,

[22] Article 101 (1) of the Treaty on the Functioning of the European Union.
[23] These guidelines do not differ materially from the Commission's draft 2022 guidelines—however, where we refer to additions in the 2022 draft guidelines we cite these explicitly. European 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. 24.
[24] Advocate General Kokott's Opinion in Case C-8/08 T-Mobile Netherlands and others (2009), para. 46.

> he endangered another road user or was even responsible for an accident. [Emphasis added]

3.10 By contrast, if a conduct is to be analysed by its effect, it must be determined whether the conduct has 'appreciable restrictive effects on competition'.[25] This requirement for an analysis of economic effects may provide insights into the forms of harm that may be relevant to a particular claimant. However, competition authorities will usually conduct such effect analyses at the market level, and as such may not identify the effects relevant to any specific undertaking or group of undertakings.

3.11 Whether the conduct is investigated by object or effect, it is important to make allowance for the different aims of public enforcement on the one hand, and private enforcement through follow-on damages actions on the other.

3.12 Competition authorities aim to deter all conduct with the aim or potential effect of harming competition. In the same way, traffic authorities aim to punish a person who drives a vehicle when significantly under the influence of alcohol or drugs, as in the example offered by Advocate General Kokott mentioned in paragraph 3.9. In this sense, public antitrust enforcement is aimed at decreasing the number of infringements in an economy.[26] Indeed, preventing the creation of cartels is seen by some as taking priority over breaking up existing cartels since it 'may be achieved for a very large number of potential law infringements in the absence of prosecution costs and cartel prices'.[27] In part to allow such enforcement to be effective, competition authorities are able to prohibit a conduct based on its 'form' or 'object'. Should it be needed, they are also given discretion in terms of where to focus an analysis of economic effects.

3.13 Therefore, a decision in the public enforcement process will not, in general, contain the analysis and reasoning needed to understand the form and extent of harm that applies to a specific claimant pursuing a follow-on damages claim.

3.14 This observation underlies the importance of a clear understanding as to the extent to which a competition authority decision can inform a private follow-on damages case. Depending on the conduct considered, a decision may give rise to a strong economic expectation that some harm would arise to a particular claimant. In many such cases it is justified that courts give weight to this expectation when interpreting empirical evidence. However, a material risk of erroneous determinations arises when the decision is referenced *in place* of empirical evidence, or used as a basis to

[25] European 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. 26.
[26] Motta, M. (2004), *Competition policy: theory and practice*, Cambridge University Press, p. 39.
[27] Spagnolo, G. (2005), 'Leniency and Whistleblowers in Antitrust', *CEPR Discussion Papers*, 5794, p. 7.

set aside empirical evidence from either party (for example, setting aside evidence from a defendant that certain conduct had no effect where is perceived to be in tension with the decision text). In economic terms the assessment of an infringement in general does not (and for a 'by object' assessment, could not) provide a substitute for a case-specific damages assessment.

3.15 We believe further guidance from the CNMC (as the originator of many of the relevant decisions in Spain) as to the value of the decision text will be highly informative to Practitioners in the context of the current damages regime. This is particularly the case as it is evident from recent cases that the extent to which an inference of harm can be drawn from a competition authority decision is becoming a central issue in Spanish litigation, and is being resolved in different ways. For example:[28]

- the Audiencia Provincial of Oviedo considered that the fact of a cartel was prosecuted by its object was evidence of some harm;[29]
- the Commercial Court of Pontevedra considered that the competition decisions and subsequent appeal determinations (CNMC, Audiencia Nacional and Tribunal Supremo) were irrefutable evidence of effects.[30]
- Oviedo's Commercial Court N 1 acknowledges that to condemn the conduct by its object, the Commission only had to review potential effects. Additionally, the court explains that '[a] conduct may have an effect on trade and not necessarily translate into a price increase'.[31]

3.16 We therefore consider that there is value in the CNMC Damages Guide outlining, in more detail, the contrasting aims of public enforcement, in the form of a competition authority decision and damages litigation. We consider that it is vital to ensuring effective private enforcement that such principles are applied by courts in a consistent way. Effective guidance with regards to the interpretation of authority decisions can play a role in ensuring this.

3.3 Relationship between the theory of harm and presumption of harm

3.17 In Spain, as the Second Draft explains,[32] there is the rebuttable presumption that cartels cause harm wherever the Damages Directive applies. This legal presumption applies to all cartels

[28] The evidential requirements of claimants and defendants are clearly matters of policy and law, as well as of economic best practice. The cases we highlight here are simply to illustrate the importance of the issue, and the different approaches courts have taken. They should not be taken to imply criticism of any particular approach the courts have taken to date.
[29] Audiencia Provincial de Oviedo, Appeal N 830/2021, 7 October 2021, p. 11.
[30] Juzgado de lo Mercantil N 1 de Pontevedra, Case N 106/2022, 13 October 2022, p. 21.
[31] Juzgado de lo Mercantil N. 1 de Oviedo, Case N 312/2019, 12 January 2022, paras. 51–53.
[32] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 15.

and does not make a distinction between different types of conduct that may be referred to as a 'cartel'.

3.18 From the checklist provided on section 2.6 of the Second Draft, it is not clear whether the guidelines advocate that an expert report should include a theory of harm in a situation where this presumption applies. The potential confusion arises from the inclusion of the presumption of harm in the theory of harm section of the checklist (i.e. under the question '¿Se ha descrito adecuadamente la teoría del daño para el caso concreto?').[33]

3.19 Our view is that, as a matter of best practice, a theory of harm is always desirable, as it informs the empirical assessment, and provides a framework through which evidence provided in the case generally can be evaluated. It helps to determine how the results can be causally linked to both the conduct and any damage suffered by the claimant.

3.20 Therefore, we suggest that the relationship between the theory and presumption of harm is clarified in the checklist. This is particularly important since we understand that this list is mainly aimed at judges for assistance in evaluating an economics expert report.

3.4 Conceptual distinction between cartels and hardcore cartels, and the Airtours criteria

3.21 The CNMC refers to 'cartels' in general throughout the Second Draft. The phrase cartel is not given a formal definition in the Second Draft, which is consistent with the everyday use of the term in practice as referring to a wide range of agreements between competitors. Indeed, the term has many possible definitions and can be applied in different contexts to a wide variety of conduct with different features.

3.22 When taken as referring (broadly) to agreement between competitors, the Second Draft's focus on cartels is apt, considering that follow-on claims from anticompetitive horizontal agreements are the current primary focus of damages litigation in Spain.

3.23 However, it is important that the convenient and flexible application of the term does not ultimately serve to mask the wide range of possible conduct that may be prohibited under Article 101, many of which will be quite different in terms of their economic effects. When assessing damages derived from a 'cartel', it will in general be helpful to understand the relevant characteristics that will influence the effect that the specific conduct may have on the market and on particular participants within it.

3.24 The most harmful forms of cartels have long been a focus of economic analysis and competition enforcement. In our 2009 study the importance of making a clear distinction between different types of agreements meant we applied the term

[33] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., paras 161–162.

'hardcore' cartels to refer to these most harmful practices such as fixing customer prices, customer allocation and bid rigging.[34] As explained in the 2009 study, any assessment of market or claimant specific effect of a hardcore cartel can draw on well-established economic theory and experience, that such conduct generally (though not always) leads to lower competition and higher prices.[35]

3.25 A corollary of this is that agreements that fall outside the realm of hardcore cartels cannot be assessed with reference to any economic theory and experience relating primarily to hardcore cartels. In such cases, further assessment is generally needed before drawing economic conclusions as to the effect of the underlying conduct.

3.26 There are well-established criteria for making such an assessment. In particular, an arrangement between competitors to restrict competition can be effective if firms are (i) able to agree on an outcome (e.g. prices); (ii) monitor each other's behaviour; (iii) deter deviations from the coordinated outcome through timely retaliation.[36]

3.27 These factors are central features of the standard mechanism through which a cartel or other agreements increase customer prices long-term and are relevant even when the conduct in question involves an explicit agreement. In such a situation, the first factor is likely to be achieved. On the other hand, if evidence is available that there is no mechanism for monitoring or deterrence, this can undermine cartel stability and with it the economic expectation that the hardcore cartel would have been effective in restricting competition and raising prices.[37]

[34] See OECD (2000), 'Hardcore cartels', report, p. 6; Niels, G., Jenkins, H. and Kavanagh, J. (2016), *Economics for Competition Lawyers*, Oxford University Press, 2nd edition, Section 5.1.2.
[35] In the case of a sellers cartel.
[36] This economic mechanism that makes a causal link between coordination on price (or output) and consumer harm (i.e. the mechanism of harm) is referred to as the 'reward-punishment mechanism' in economic theory: colluding firms agree—implicitly or explicitly—to keep prices high and output low as long as others do (reward) and retaliate with low prices and high output when others deviate from the collusive outcome (punishment). See Harrington, J.E. (2017), *The Theory of Collusion and Competition Policy*, The MIT Press.
[37] It can, for example, be shown that firms have a great incentive to deviate, at least for some time. It temporarily becomes more profitable for them to undercut the cartel price than to stick to the agreement, as large quantities of the product can be sold. Firms will, therefore, need to coordinate in a less profitable way if they cannot monitor and punish member sufficiently. Green and Porter (1984) show that in order to achieve a collusive equilibrium when there are demand fluctuations and imperfect monitoring of competitor prices, there must be periods of price-wars between the participants (i.e. periods in which there must be a reversion to competition between the firms). This is because firms cannot establish whether a drop in own demand is because of demand fluctuations or competitor pricing. In other words, when firms enter into the collusive scheme with limited ability to monitor each other's decisions, there will be periods with high prices and periods with competitive prices. The overall effect of the conduct on market prices will be limited. Green, E.J. and Porter, R.H. (1984), 'Noncooperative collusion under imperfect price information', *Econometrica: Journal of the Econometric Society*, pp. 87–100.

3.28 Modified versions of this criteria have been considered in different contexts. For example, the EU General Court's 2002 *Airtours* Decision established the criteria to assess the feasibility of economic collusion in the context of merger reviews ('*Airtours* criteria').[38]

3.29 In the absence of the conditions above, it is doubtful that any form of cartel would be able to sustain any collusive conduct in the long-term. In cases where the likelihood of harm arising is important to evaluating the evidence on quantification of losses, it will, therefore, often be informative for courts to consider the conduct at issue with reference to *Airtours* or equivalent criteria. As these considerations in the assessment of cartels are frequently complex and interlocking, we consider that there is value in including some discussion of both these criteria, and the range of different forms of cartel conduct (which could include the notion of a 'hardcore cartel' from the Oxera 2009 Study)[39] in the CNMC Damages Guide.

[38] European Court of First instance, Case N T-342/99 *Airtours plc v EC Commission*, 6 June 3003.
[39] Oxera (2009), op. cit., section 4.1.

4 Further emphasis on the need for a case-specific estimation

4.1 Introduction

4.1 The Second Draft appropriately describes the need for a case-based analysis. While the First Draft already put some emphasis on this requirement, the Second Draft underlines it even more clearly. In particular it encourages a case-based approach, by stressing 'the importance of choosing a methodology suitable for the specific characteristics of the case and the availability of data'.[40] The draft goes onto conclude that: [41]

> Finally, it should be noted that **quantifications** based exclusively on damage estimates from **previous judgments** in similar cases, or on the **automatic application** of an average percentage of past cartels or from the economic literature, are not necessarily **a good approximation of the damage caused in a particular case**. Each claim, even if it concerns the same conduct as others, may have **particularities** that can only be taken into account if the quantification method is adapted to the claim under analysis.

4.2 We welcome these clear expressions of the risks associated with non-specific approach to damages and there are other areas where these risks could be further clarified.

4.3 We outline these in the following subsections. First, we suggest including a brief section about the costs of relying on averages or previous cases to define an overcharge (section 4.2). Second, we propose some additions to the meta-studies revision section of the Second Draft (section 4.15).

4.2 Costs of relying on averages or previous cases

4.4 There are a range of tangible costs that arise from the application of non-case-specific damages estimates to particular cases, particularly when this becomes established as general practice.

4.5 The primary concern is the potentially substantial cost of error involved. Based on the data underlying the meta-study included in the Oxera 2009 Study and replicated elsewhere, there is a wide distribution in past cartel overcharges (in the 2009 study ranging from 0% up to 50–60%).[42] Therefore, the application of any 'average' or notional value based on past cases carries a significant risk that the actual harm caused would be considerably greater or smaller than the compensation awarded.

4.6 In particular, the possibility that compensation would be awarded when the cartel at hand actually did not lead to any overcharge at all, or that claimants find they are left with only

[40] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 217.
[41] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 223.vii. Translation by Oxera.
[42] Oxera (2009), op. cit., Figure 4.1.

a fraction of their actual losses, would both be plausible outcomes. Taking for illustration the distribution in the Oxera 2009 Study's meta-study dataset, the average absolute error in the estimate that would result from applying the average overcharge to the cases included would be more than 11 percentage points.[43] Many cases would of course have even larger errors, and such a statistic abstracts from the additional variation that arises from the fact a particular cartel may affect some claimants, locations or time periods more than others. The potential for material errors in the damages award is therefore significant.

4.7 In addition to providing incorrect compensation, relying on averages or previous cases may also lead to distortions of the parties' incentives to engage positively with the available economic evidence.

4.8 Consider a case where there are some methodological deficiencies in the claimant's econometric estimation. Given that the judge could not rely on the econometric evidence provided by the claimant, he or she may decide to conduct a non-specific estimation, and award (for illustration) a 10% overcharge. In the hypothetical case that a claimants knows that correcting its estimations would result in a less than 10% overcharge, it has no incentives to do so if it knows that the judge will end up awarding a 10% overcharge. The same could happen in reverse with a defendant that knows that a properly applied quantitative methodology would lead to an overcharge higher than 10%. It would be more advantageous to provide an unreliable estimation and leave the judge to apply the judicial estimation of 10% overcharge.

4.9 While there is no evidence that these incentives were at play, there are examples of cases where the parties have failed to engage in further development of their evidence. In Pontevedra's Commercial Court decision in a claim against PSAG, the judge and defendants specified some shortcomings in the claimants' analysis. Nevertheless, the claimants refused to correct their estimation resulting in a judicially estimated award:[44]

> **The defendant refuses to correct the content of that report**, so we will have to analyse whether the methods followed and the conclusions reached can be considered reasonable enough to recognize the amounts mentioned therein; and we anticipate

[43] See section 2 of Oxera's First Submission. An error of 11% implies that, in a case involving a value of commerce of €50m, awarding €10m in direct damages (20%), would represent an over-or undercompensation of more than €5.5m, on average. Claimants would, therefore, either receive an average of €5.5 million less or the cartel members would pay an average of €5.5 million more than the damage caused by the infringement. The cost of error could also be much higher than this mean value. For instance, if a cartel applied an overcharge of 50%, the claimant would miss out on €15 million in the previous example.

[44] Juzgado de lo Mercantil N 1 de Pontevedra, Case N 106/2022, 13 October 2022, p. 21. Translation by Oxera.

that we cannot share those conclusions in full. [Emphasis added]

4.10 There are also indirect costs arising from a non-specific estimation of damages.

4.11 On the one hand, it may cause an increase in the number of spurious claims. Customers that are knowingly unaffected by a particular infringement may, nevertheless, litigate if they believe that judges will not require them to give quantitative evidence of any harm they may have suffered. This will not only negatively affect companies, but also increase the burden on courts and judges and lead to the risk of unjustified overcompensation.

4.12 On the other hand, the number of substantiated claims might also decline. A litigation process could become unprofitable for some claimants if judges referred to past cases or average overcharges in a context where the true value of damages is much higher. The damages awarded to such claimants would be lower than what that they are entitled to. Indeed, in such cases the incentive effects could spill over to the infringement itself. Opportunities for collusion which could have a significant effect on prices are likely to be more appealing for potential infringers in a context where they have a degree of confidence that they would only have to pay notional or average-based levels of compensation should the conduct be subject to damages claims. This blunts the deterrent effect of private enforcement with respect to precisely the types of collusion that are most harmful.

4.13 Problematic incentive effects may also be found with regard to public enforcement. Even once illegal activity is identified internally, firms might refrain from applying for leniency in cases where they believe the effect of the infringement was small, if they believe that they will be charged large sums in damages claims later on based on a non-specific benchmark.[45] Even if detected, such firms will have greater incentives to challenge the competition authority's findings, reducing the prospects of settlement and a quick resolution of the infringement proceedings.

4.14 We consider that highlighting such potential costs of relying on averages or previous cases in damages claims in the CNMC Damages Guide may be useful to ensure such costs are given due weight by courts when considering how overcharges (and damages more broadly) are best determined.

4.15 The fact that meta-studies are not useful to estimate damages in a specific case does not mean that they are not valuable. This literature provide helpful insights about how cartels operate and can have an effect in the market. For that reason,

[45] The immunity of the first leniency applicant is not extended to private damage claims. See: European Commission (2014), 'Directive 2014/104/EU of the European Parliament and of the Council of 26 November 2014 on certain rules governing actions for damages under national law for infringements of the competition law provisions of the Member States and of the European Union Text with EEA relevance', 5 December, pp. 1–19.

we value the revision of meta-studies in section 3.3. of the Second Draft. We consider that a valuable addition to that section is the Oxera 2009 Study's analysis for two reason. First, it is a careful analysis that shows the wide distribution of overcharges that a cartel can cause, demonstrating that most cartels have an effect in the market, though some do not.[46] Second, we observe that the Oxera 2009 Study is often referred to in cartel litigation proceedings in Spain. In many cases Practitioners have focused on one of the study's conclusions (i.e. that most cartels cause an effect) as evidence of all cartels having an effect on prices, ignoring that the same study shows that some cartels do not have an effect on prices.

4.16 Therefore we consider it would be beneficial if the CNMC Damages Guide also provides a reference to this study, providing that any such reference (i) also makes reference to and captures the description of this meta-study included in the Oxera 2009 Study itself and (ii) the meta-study is properly contextualised, noting the limits to the use of meta-studies in a damages setting discussed in this section.

[46] Oxera (2009), op. cit., pp. 90–92.

5 Conclusion

5.1 We consider that the Second Draft has valuable additions to the First Draft. It provides a more developed framework for judges, courts, lawyers and economists to implement and assess quantitative analyses in damages procedures. The inclusion of a practical example and a checklist has helped make the guidance more practical and specific.

5.2 As explained in the previous sections, we consider that the clarification and discussion of certain issues could be meaningfully expanded in the CNMC Damages Guide in order to make sure that Practitioners consider such issues fully when preparing and assessing quantitative estimations in competition damages cases.

5.3 Our final and concluding comment relates to the future development of competition damages process in Spain.

5.4 The civil judicial system in Spain faces important challenges when it comes to competition damages claims. Since there is no established procedure of aggregating cases concerning the same conduct, civils courts face a significant of cases for each infringement. For example, there are already over 2,000 decisions on damages claims derived from the EU Trucks infringement in Spain.[47] Based purely on the size of the relevant product sales volumes, it is possible that a similar or even greater number of claims will follow the Cars makers infringement condemned by the CNMC in 2015.

5.5 It is not straightforward to econometrically estimate the effect of the cartel in one particular transaction. On a principled level, the process inherently implies estimating an aggregated average effect of the specific conduct on the relevant variable (i.e. prices). There may also be practical constraints; econometric analysis is resource intensive and it may be difficult to justify from a cost perspective where the associated claim value is very small, even if (taken in aggregate) the value of claims clearly justifies a thorough econometric analysis. The judge may also lack access to the relevant expertise to interrogate an econometric analysis, or have insufficient time allocated to hearing the case to allow them to do so.[48]

5.6 When evaluating a claim where these factors apply, judges may be reluctant to consider econometric evidence, and decide to award a standard or average overcharge regardless of the particulars of the case. As a consequence, reviewing individual claims in separate proceedings increases the risks of unfair

[47] Marcos, F. (2022), 'Jurisprudencia menor sobre los daños causados por el cártel de camiones', *Almacen de Derecho*, 21 January 2022.
[48] This challenge applies internationally, and has frequently resulted in courts appointing their own experts to allow the evidence to be evaluated. Specialist competition courts may also be established (for example in the UK, Austria and Portugal) to ensure that judges have access to the required expertise. See OECD (2016), *The resolution of competition cases by specialised and generalist courts: Stocktaking of international experiences*, section 5.

compensation, as discussed section 4 of this response. For example, a claimant may get a lower compensation because of lack of access to quality estimations of the effect, or a defendant may find themselves require to pay compensation to a claimant who, in reality, was not affected.

5.7 While we believe that the CNMC Damages Guide has the potential to offset these risks through its recommendation with regard to quantification methods, there is also likely to be value in the CNMC considering and evaluating the wider procedural context in Spain.

5.8 For example, in order to assess the current competition infringement compensation system, it would be helpful to evaluate the system empirically. This assessment could include an analysis of the level of variation in overcharges awarded in cases related to the same conduct, the proportion of cases in which parties offer empirical estimations, and the proportion of decisions that are considering such evidence.

5.9 Where appropriate, the CNMC could draw on such an assessment to advocate or recommend wider procedural changes or refinements to help ensure all Practitioners (judges and economic experts included) are operating in a litigation environment where the guidelines can be fully applied. The recent growth in competition damages litigation across Europe ensures there is a wide range of different established practices and experiences internationally that could be used to inform such recommendations.

A1 Comments on checklist

A1.1 Checklists for Practitioners such as that contained in the Second Draft can assist in assessing the quantification of damages. The difficulty with such checklists in the context of competition litigation is that every case is different—no list can be created that covers all contingencies as to the kinds of issues courts will need to examine. One potential response is to make the checklists extensive and flexible to cover as many contingencies as possible, at the cost of creating a list that is burdensome to apply.

A1.2 We consider that the checklist provided by the CNMC in section 2.6 of the Second Draft broadly strikes this balance well. Nevertheless, we consider further clarification upfront that the checklist is to serve as a reference and 'aide-momoire' for the application of the principles set out in the guides (rather than a complete or prescriptive set of requirements) would be valuable in the context of a list that may be read in isolation. Specifically, the introduction explains that the requirements are 'non-exclusive' and 'non-exhaustive' but should also explain that not every requirement will be relevant to every case—it depends on the nature of the infringement at issue and the quantitative approach applied.

A1.3 As to the checklist itself, it is clear that the issues for courts to consider, and phrasing of these, is a matter of judgment, and different economic practitioners will emphasise different aspects. It is therefore difficult (and unlikely to be of assistance to the CNMC) for Oxera to make overly specific recommendations for how the list could be modified or improved purely in the abstract (i.e. outside the context of a specific case).

A1.4 Nevertheless, we make the following observations for the CNMC's general consideration with regard to the checklist.[49]

- The expert report should include a description up front of the scope of the expert analysis and instructions. The checklist could highlight this requirement.
- Similarly, the checklist does not explicitly state that reports should include a justification of the selection of the quantification methods or methods, and could include such a requirement.
- The heading to paragraph 159 asks whether the market has been 'defined'. We suggest rephrasing to avoid suggesting a formal market definition exercise will be necessary. A better phrase would be 'described'.
- We noted in section 3.3 that from our perspective as economists, the description in paras. 161—162 could be better clarified.
- Paragraph 164 states that 'In addition, it is advisable to include tests that show the similarity between the two sets (e.g. tests of means, parallel paths, etc.)'. By our

[49] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., section 2.6.1

understanding, this recommendation applies primarily to counterfactuals constructed using the comparator method, and would be more logically situated in the method checklist. This paragraph could also include a reminder that the proposed counterfactual must itself be compatible with competition law.

- Paragraphs 169–170 mention that expert reports should detail the data collection process and the completeness of the data. We suggest including that the report should also discuss the reliability of the data and consider any limits to its accuracy and consistency.
- It could be mentioned in paragraph 172 that the replicability of the results should be assured. In particular, it should mention that it is best practice and efficient for expert reports to be accompanied by a datapack, containing the dataset and codes used in their quantitative estimation.
- Paragraph 178 specifies that it is necessary to check how the specification, assumptions or set of variables included influence the results of the analysis. This point could also highlight the potential benefit of testing the result's sensitivity to different methods.
- The order of the check list could better cohere with the normal ordering of an expert analysis. For instance, it would usually be expected that an expert would first select, justify and explain the quantification method and then explain the application of it (i.e. selection of variables, delimitation of infringement period, and dataset used, which will vary by method). The 'capitalisation' of losses generally comes towards the end of quantification, and nearly always after the pass-on assessment (as interest will only be applied to absorbed losses).

A1.5 On the checklist relating to comparative methods, we suggest the following clarifications.

- Paragraph 183 could more clearly explain that a comparative market does not have to have the same price level, but parallel trends when employing the difference-in-differences method.
- The checklist mentions that statistical tests should be used to show the comparability of the two markets. It might be beneficial to give an example of some statistical tests which are commonly used for that purpose, e.g. price correlation. Paragraph 185 could clarify that comparability is not just a statistical exercise, but can draw where appropriate on qualitative/factual information about the comparator groups.
- Paragraph 186 could specify that the comparability of the markets should be established and that other factors that may have influenced the variable of interest should be accounted for. The differences of the markets should be established more generally by the expert report.

A1.6 Finally, with respect to the checklist relating to simulation models: it is likely to be instructive to add that simulation

models are highly sensitive to the assumptions made when constructing them. Specifically, they are susceptible to postulations on the oligopoly behaviour before, during and after the existence of the cartel; the market structure and the shape of the demand curve among other factors. In particular, we consider paragraph 191 could make clear the points listed are non-exhaustive and model specific. Additionally, the list in these paragraph should explicitly include market concentration as a relevant consideration to justify the competition model chosen by the expert. For clarity, paragraph 191 should also include the possible competition models, i.e. Bertrand, Cournot, Stackelberg etc.

A2 Comments on econometric annexes

A2.1 Oxera welcomes the glossary of concepts and the econometric annexes as helpful sources of guidance for practitioners. Below, we present some comments which we consider would further strengthen the annexes by (i) preventing possible misinterpretations, (ii) further clarifying guidance on points which, in our experience as economic experts, are often heavily debated in competition damage cases.

A2.2 In summary, we suggest:

- further emphasising the stylised nature of the example in Annex 3;
- drawing on Annex 3 as an opportunity to provide additional practical guidance on key points;
- clarifying some explanations to prevent misinterpretations;
- promoting the accessibility of parts of the annexes to readers with less of an economics background.

A2.1 Emphasising the stylised nature of the example in Annex 3

A2.3 We understand that the practical example set out in Annex 3 is based on simulated data.[50] The benefit of such data as a pedagogical tool is clear and evident, particularly in the annex examples. It allows for the creation of a dataset in which the application of statistical tests can be clearly motivated, and the results are straightforward to interpret. The disadvantage of simulated data is that such 'idealised' results might be misinterpreted by some readers as being the form and standard of statistical evidence to be expected in real cases.

A2.4 In practice most cases will fall some way short of this standard in terms of the extent and quality of the underlying data. In our experience, data available is generally subject to material limitations (e.g. there may be no reliable data prior to, and during the first months of, the cartel period) such that while an analysis remains possible, some approaches may not be feasible.

A2.5 Interpreting the results in such a 'real world' setting will require a degree of judgement on the part of the quantifying expert that, while valid, could differ significantly to the more 'textbook' reasoning evident in Annex 3.

A2.6 To avoid any potential misunderstandings, we would propose that the CNMC:

- place further emphasis on the 'stylised' nature of the example in the way it is introduced;
- make clearer the link between the simulated nature of the data and the `clarity' of the results.

A2.7 For instance, it may be helpful to clarify that multiple regression approaches are feasible in the example because (i)

[50] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 351.

data is available for all firms for a long period of time before, during and after the infringement, (ii) there are no industry-specific issues such as structural breaks. As the different data requirements of different approaches are discussed elsewhere in the draft guidelines, it would be potentially informative to add a brief reminder in Annex 3, as well as references to the relevant sections. This would reduce the risk of a reader consulting Annex 3 in isolation, and misunderstanding this example.

A2.8 Similarly, it might be helpful to further remind readers that the clear patterns which emerge from the graphs, the significance of most regression coefficients in various specifications, and the extremely high explanatory power (R^2) of the regressions, are at least in part a consequence of the idealised data being used and may not be expected of every such analysis that takes place in a litigation setting.

A2.9 Clarifying that the form and clarity of any econometric analysis will depend on the quality of data available in different cases, no matter how well designed, may serve as a useful reminder that econometric analysis is often valuable even with noisy and imperfect data. For example, some readers may mistakenly conclude that results are always to be discarded unless they meet a specific, very high, significance level. To mitigate this risk, it would be helpful, in Annex 3, to acknowledge that different significance thresholds may be considered sufficiently good evidence in different contexts, and refer back to the discussion of Type I and Type II errors and the balancing act between these risks which must always be case specific.

A2.10 Moreover, it can be informative, when presenting any example, to make clear where variations to the framework outlined may arise. In this sense, it could be helpful to remind the reader of the key empirical considerations that are likely to be encountered in practice at each step of the example case. This could be done briefly, and the reader referred to the parts of the main body, or of Annex 2, where guidance is provided on addressing these issues.

A2.11 For instance, while in the example in Annex 3 umbrella effects are not relevant because all competitors in the market were involved in the cartel, it would still be helpful to remind the reader that these are often encountered in practice, and refer to the discussion of how to approach the analysis if umbrella effects are suspected. Similarly, Annex 3 states that the start and end dates of the cartel are known in the example.[51] At that point, we suggest referring back to the discussion of how to potentially address unknown infringement dates.[52] These types of additions would be a helpful reminder that econometric analysis can be applied in a flexible way, depending on case-specific complexities.

[51] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., para. 354.
[52] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., paras 60–62.

A2.2 Further practical guidance on frequently contested topics

A2.12 In Oxera's view, there are some important features of analysis, which are frequent objects of debate in cases, not yet referenced in Annex 3. Adding explicit consideration of these features, which are discussed elsewhere in the draft guidelines, but currently not within the example, would help provide more complete practical guidance to Practitioners. Some specific suggestions are outlined in Table A1 below.

Table A1 Summary of suggested additions to Annex 3 of the Second Draft

Consideration	Comment
Whether the claimants may have passed on part of the damages to consumers of the final product	We understand that the case in Annex 3 involves cartelised firms overcharging for an intermediate product. In this case, the firms who purchased the intermediate product may have passed on part of the overcharge to consumers of the final product. It would be helpful to add that in a complete quantification analysis this stage would also be included (and may also apply econometric techniques). Equally, the scenario could be set up in a way to allow an explanation of why, based on specificities of the case, the pass-on analysis is not necessary.
How to choose between different approaches	The results of different regression approaches (cross-section approach, dummy variable approach, diff-in-diff) are set out in Annex 3, but there is little discussion of which approach would be most appropriate given the specificities of the case and data. In our experience as experts, this point is often heavily debated in cases and hence providing clearer guidance on how to approach it in practice, would be very beneficial. This is particularly relevant when results from different methods present important differences, which is not the case on the practical example in Annex 3. Nevertheless, it would be helpful to mention in that section that the advantages and disadvantages mentioned in section 2.3 of the Second Draft should be considered along with the specific case characteristics and available data to choose the most appropriate model.
Whether to include factory fixed effects in the regressions	It would be helpful to clarify whether the diff-in-diff regressions presented in Table 9 include factory fixed effects or not. Table 9 and paragraph 424 refer to region / market fixed effects (but not factory fixed effects), while paragraph 428 refers to factory fixed effects. Moreover, it would be valuable to explain how the specifics of the case relate to the inclusion (or exclusion) of factory fixed effects. Currently, para 428 concludes that we are dealing with a fixed effects model based on the significance of the coefficients. Adding a short explanation of the conceptual reasoning that led to checking the potential significance of fixed effects in the first place would provide additional value as practical guidance.
How to model persistence appropriately in regressions using data with a time dimension	It would be helpful to provide further guidance on how inter-temporal dynamics can be dealt with in practice. For instance, we note that the time-series regressions in paragraph 412 and table 8 do not include lags of prices. As modelling persistence of prices can be important in some contexts (in some industries firms avoid drastic price changes, and hence current prices are a function of past prices), it would be helpful to provide some practical guidance on how to assess whether this is the case. In the context of the example, it would be helpful to briefly explain why price persistence was not considered an issue, and how persistence can be dealt with when it is suspected to be an important factor. Within the discussion of how to deal with persistence in practice, it would be important to also mention how to assess the risk of unit root problems when inter-temporal dynamics are likely to play an important role.

A2.13 Moreover, we consider that Annex 3 could be harnessed to illustrate two crucial points in an applied setting which the guidelines currently address only conceptually.

A2.14 First, we consider Annex 3 could place additional emphasis on the potential role of control variables in reaching a more accurate overcharge estimate than a simple comparison of averages. In Table 7, the cartel coefficient is shown to be larger with the inclusion of control variables, suggesting that the

simple comparison of averages would underestimate the damages. Therefore, including the benefits of the use of regression analysis in general, and a range of appropriate control variables in particular, to highlight how they improve estimations would be a valuable addition.[53]

A2.15 Additionally, it would be helpful to further emphasise the links between (i) the conceptual elements of the case, including the theory of harm and industry specificities, (ii) data availability, (iii) best practice for making econometric modelling choices. While these links are touched on in the example, choices of econometric approach and regression specification are frequently a step in the analysis which requires careful consideration. Therefore, the guidelines could provide further value by clarifying how to go about these choices in practice, within the context of the example in Annex 3, for example:

- Paragraph 366 mentions that the `quantity' variable is potentially endogenous, but seems to assume the `quantity imported' variable is not. Whether a variable is considered endogenous or not is one of the crucial points that are contestable in an econometric analysis. It would therefore be helpful to spell out the practical steps that link the conceptual elements of the case to these conclusions.
- Paragraph 389 assumes that a quadratic relationship has been detected between material cost and prices. It would be helpful to explain the link between conceptual features of the industry and the form in which we may expect input costs to enter the regression specification. In this case, the judgment appears to be based on a graphical analysis of the relationship between these two variables alone. However, this result could be spurious, as other variables likely affect both costs and prices. Where such an observation coheres with what is expected based on understanding of the industry, then that would provide a stronger ground for the conclusion of the quadratic relationship.[54]

A2.3 Suggested clarifications

A2.16 Additionally, we consider a small number of definitions and statements that could be further clarified.

- The definition of unobserved heterogeneity in Annex 1 seems to suggest that all unobserved heterogeneity is time-invariant. It may be helpful to clarify that heterogeneity can

[53] For example, the Oxera 2009 Study shows that, with regard to these benefits: 'Regression techniques are statistical methods that can be used to explain the variation in a piece of data using other factors. These techniques address one of the main shortcomings of a simple comparison of averages—i.e. finding markets that are sufficiently similar—by controlling for differences in market or firm characteristics in the relevant and comparator markets', Oxera (2009), op. cit., p. 51.
[54] If, instead, this type of industry knowledge is not available in the specific case, showing multiple regressions with different functional forms for the costs, and how one is selected, would provide helpful guidance.

have a temporal dimension, and link this to the possible use of time-fixed effects.[55]

- The definitions of fixed and random effects in Annex 1 could make the differences between the two models clearer.[56]
- The definition of robustness in Annex 1 may be misunderstood as saying that a result is robust if it is invariant to *substantial* changes in the assumptions it relies on. However, results should of course be expected to change if fundamental features of the underlying model are changed. We suggest clarifying that this property relates to *relatively small* changes in the underlying assumptions;[57]
- In the definition of outliers in Annex 1 it could be made clearer that, in some cases, data points which are far from the majority of data are genuine, correct observations from the same population.[58]
- Paragraph 407 may be misunderstood to mean that, wherever 2SLS estimates differ from OLS estimates, the former are preferable. This is only the case if (i) the OLS regression does in fact have an endogeneity problem, (ii) the 2SLS approach is based on an IV which is actually valid (the instrument is itself exogenous and sufficiently strong). It would be helpful to clarify that the 2SLS estimates are validated by economic theory and specificities of the case.

A2.4 Accessibility of the econometric annexes

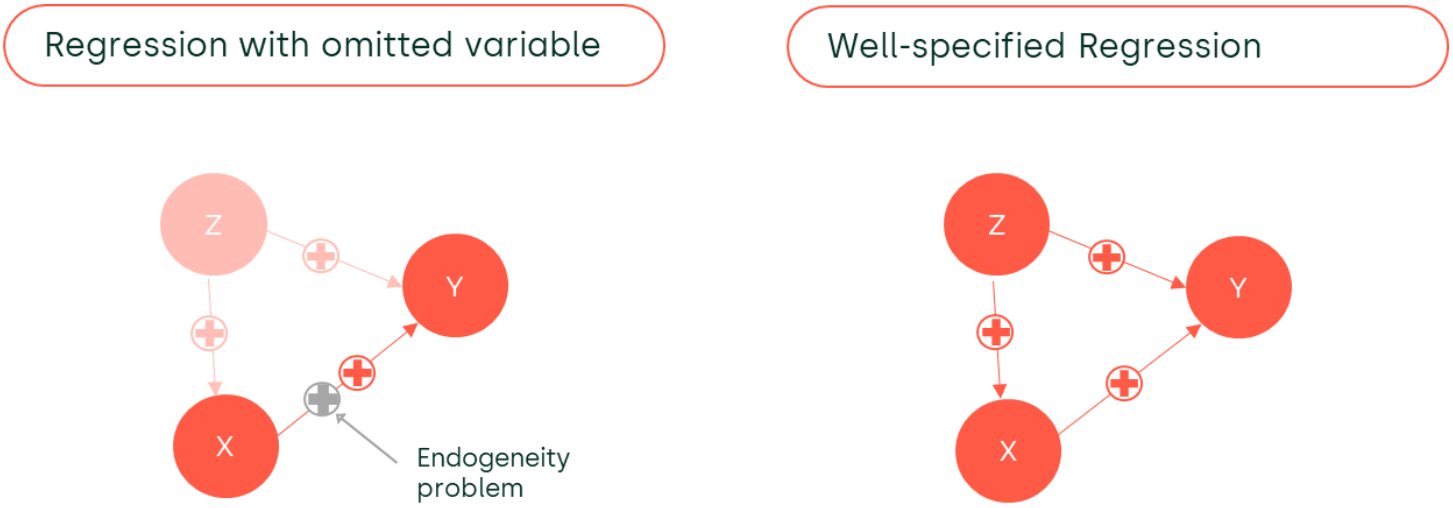
A2.17 We understand that all three annexes are aimed at a variety of practitioners with varying degrees of understanding of economic and statistical concepts. However, we consider that some of the concepts are presented in a more technical manner than is necessary. This could potentially constitute a barrier to engagement by practitioners with less of a background in economics, and reduce the overall accessibility of the guidelines. We consider that this risk could be mitigated by the addition of a few more intuitive explanations alongside the technical terminology, without prejudice to the economic accuracy of the guidance.

A2.18 For instance, endogeneity is a fundamental concept necessary to understand both (i) the value of econometrics over simpler quantification techniques, (ii) the potential pitfalls of econometric analysis. To allow readers, especially those with less economic training, to best understand the concept it may be helpful to provide a visual representation to complement the conceptual explanation in the draft. For instance, a diagram like the one below could help clarify the mechanism by which omitting relevant controls can lead to biased estimates. It

[55] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., p. 89: 'Heterogeneidad inobversable'.
[56] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., p. 92: 'Modelo de efectos fijos' and 'Modelo de efectos aleatorios'.
[57] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., p. 94: 'Robustez'.
[58] Comisión Nacional de los Mercados y la Competencia (2022), op. cit., p. 96: 'Valores atípicos (outliers)'.

shows that, the control variable Z has a positive effect on both the explanatory X and the dependent variable Y. Therefore, the omission of Z leads to an endogeneity problem by inflating the estimator of X.

Figure A.1: Endogeneity caused by omitted variable bias



Source: Oxera.

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