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**Working Party No. 2 on Competition and Regulation**

**Assessing and Communicating the Benefits of Competition Interventions – Note by the  
European Union**

12 June 2023

This document reproduces a written contribution from the European Union submitted for Item 6 of the 75th meeting of Working Party 2 on 12 June 2023.

More documents related to this discussion can be found at  
<https://www.oecd.org/competition/assessing-and-communicating-the-benefits-of-competition-interventions.htm>

Federica MAIORANO  
Email : [Federica.MAIORANO@oecd.org](mailto:Federica.MAIORANO@oecd.org)

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## *European Union*

### **Part 1: Assessing the Benefits of Competition Interventions**

#### **1. Introduction**

1. The enforcement and communication challenges faced by competition authorities such as the European Commission ('the Commission') are significant.
2. Enforcement activities must assess the likely competition impact of often unprecedented changes in how large and complex markets operate as a result of mergers, agreements and company conduct<sup>1</sup>, while being constrained by limited information, time and resources. Given the time and resource limitations, enforcement must also be undertaken based on effective priority setting focussing on those sectors and cases where it makes a difference.
3. Communication activities must (1) convince sometimes sceptical<sup>2</sup> stakeholders of the benefits of competition enforcement and competition<sup>3</sup>, (2) build trust in the effectiveness and fairness of the enforcement activities of the authority and (3) contribute to the accountability of the authority to government and parliamentary stakeholders.
4. Assessing and communicating regularly about the impact of a competition authority's competition enforcement activities can help to address both challenges. It can support an authority's efforts to measure and, on this basis, further improve its performance over time in terms of output, impact and priority setting. It can also support an authority's advocacy and accountability efforts in that it provides quantitative indicators of the likely positive effects and the 'value for money' of the work of the authority.
5. The Commission's antitrust and merger enforcement which is conducted by the Directorate General for Competition ('DG Competition') has as its objective to protect effective competition on the market with a view to ensure lower prices, higher quality products and more innovation for the benefit of customers<sup>4</sup> and the EU economy as whole.
6. With these objectives in mind and in line with international practice, DG Competition distinguishes when estimating the impact of the Commission's competition enforcement between:

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<sup>1</sup> The Commission's enforcement activities in the area of state aid control are outside the scope of this note.

<sup>2</sup> By way of illustration, in 2007 then French President Sarkozy reportedly asked during the negotiations on the Lisbon Treaty 'What has [competition] done for Europe?' Financial Times, EU Leaders strike deal on 'reform' treaty, 22 June 2007.

<sup>3</sup> Assessing the impact of competition enforcement is not the same as assessing the impact of effective competition. Effective competition is not just determined by competition policy and enforcement, but also by other factors including sectoral regulations, general rules such as the ones on public procurement, insolvency laws, trade and taxes, or the role of the State in the economy (including via the provision of State aid). The economic benefits of competition enforcement, while significant, are thus different and not as large as the benefits of effective competition overall.

<sup>4</sup> Final consumers, but also customers of intermediate goods and services.

- the likely direct price effects for customers of the Commission’s interventions in the markets concerned (‘direct customer savings’), which can be relatively easily estimated using a methodology suggested by the OECD<sup>5</sup>, combining case specific information with simplifying assumptions derived from the economic literature;
  - the likely indirect deterrent effects of enforcement on prices, i.e. the customer savings generated by the deterrence of anticompetitive conduct which would have taken place in the absence of competition enforcement; economists consider that the deterrent effects of enforcement are likely significantly larger than the direct effects, but also more difficult to estimate<sup>6</sup>;
  - the likely dynamic effects on innovation and quality in the markets affected; those effects are also assumed to be significant and particularly important for economic progress, but are even more difficult to (even approximately) quantify than the deterrent effects;
  - the macroeconomic impact of enforcement resulting from the decrease in prices and economic ‘mark-ups’ (i.e. the wedge between the average selling price and average marginal cost) on GDP, prices, investment and other macro-economic variables.
7. The note is structured as follows.
- Section 2 provides an overview of DG Competition’s activities to assess the impact of its enforcement and explains their place within DG Competition’s overall evaluation strategy.
  - Section 3 presents in some detail DG Competition’s annual assessment of the direct customer savings generated by its antitrust and merger enforcement.
  - Section 4 reports on DG Competition’s efforts conducted jointly with staff from the Directorate General for Economic and Financial Affairs (‘DG ECFIN’) and the Commission’s Joint Research Center (‘JRC’) to model the macroeconomic impact of the Commission’s enforcement activities on GDP and prices.
  - Section 5 provides background on a recent tender of DG Competition for a study on the deterrent effects of competition enforcement actions.
  - Section 6 briefly sets out the communication tools used by DG Competition to communicate on the impact of its enforcement activities. Please note that communication on the impact of a competition authority’s enforcement is just one small part of its wider communication efforts which are discussed more fully in a companion note submitted by DG Competition to the same roundtable.

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<sup>5</sup> OECD (2014). Guide for helping competition authorities assess the expected impact of their activities (“OECD Guide”), available at <https://www.oecd.org/daf/competition/Guide-competition-impact-assessmentEN.pdf>

<sup>6</sup> Cf. Nelson, P., and S. Sun. “Consumer Savings from Merger Enforcement: A Review of the Antitrust Agencies’ Estimates.” *Antitrust Law Journal*, 69, 2001, 921–60. Clougherty J., Duso T., Lee M. and Seldeslachts J. (2016), ‘Effective European antitrust: Does EC merger policy generate deterrence?’, *Economic Inquiry*, 54(4), pp. 1884-1903.

## 2. Overview of DG Competition's activities to assess the impact of its competition enforcement and their role within DG Competition's overall evaluation strategy

8. DG Competition assesses the impact of its competition enforcement actions based on two regularly conducted exercises, which are linked with each other.

9. The foundation of DG Competition's impact assessment is its annual assessment of the direct customer savings. The calculation of the direct customer savings at DG Competition, inspired by the 2014 OECD methodology, is conducted during the first months of each year and feeds into the Competition Policy Report and the Annual Activity Report for the previous year. DG Competition has conducted this exercise every year since 2012 for cartels and merger enforcement. In 2022 it has retroactively calculated corresponding figures for non-cartel antitrust activities (i.e. agreements under Article 101 TFEU which are not cartels within the meaning of the leniency notice<sup>7</sup> and dominant firm conduct under Article 102 TFEU) and is as of this year regularly reporting about the customer savings generated by the three instruments.

10. This first activity will be described in Section 3 below, the main section in this note. It will in particular discuss (1) the methodology and assumptions relied on by DG Competition, (2) selected methodological issues, (3) the practical implementation of the methodology, (4) results of the customer savings estimations for the last 11 years and (5) efforts by the EU's European Competition Network ('ECN') composed of the Commission and EU National Competition Authorities ('NCAs') to deepen cooperation on the assessment of direct customer savings.

11. The second type of impact assessment activity carried out by DG Competition is a macro modelling exercise conducted jointly with DG ECFIN and the JRC aimed at providing an estimate of how DG Competition's enforcement activities might affect EU GDP and prices. For this purpose, DG Competition uses the direct customer savings calculations as input, estimates on that basis ('bottom-up') the likely deterrence effects of DG Competition's enforcement and, finally, models based on a macro-economic model the likely effects on prices and mark-ups in affected sectors and ultimately on broader macroeconomic parameters such as GDP, investment and overall prices. This exercise has now been conducted and refined over several consecutive years.<sup>8</sup>

12. A key issue for estimating the impact of competition enforcement both at the micro and the macro level is whether progress can be made on the estimation of the deterrent effects of enforcement. For this purpose, DG Competition recently launched a tender for a study of this topic.<sup>9</sup>

13. Finally, DG Competition engages in communication activities to communicate the results of its impact assessment activities.<sup>10</sup>

14. Before describing in more detail, the impact assessment activities of DG Competition, it is useful to set out briefly the role which they play in the Commission's and DG Competition's wider overall ex post economic evaluation strategy.

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<sup>7</sup> Commission notice on immunity from fines and reduction of fines in cartel cases, OJ C 298, 8.12.2006 p. 17-32.

<sup>8</sup> See Section 4 below.

<sup>9</sup> See Section 5 below.

<sup>10</sup> See a brief list in section 6 below.

15. In their book “Good Economics for Hard Times: Better Answers to Our Biggest Problems”, Abhijit Banerjee and Esther Duflo<sup>11</sup> make the point that, “To make progress, we have to constantly go back to the facts, acknowledge our errors, and move on.” They correctly highlight the importance of evidence-based policymaking and of evaluation tools to improve the regulatory environment and policy enforcement.

16. In line with this philosophy, the Commission as a whole is making considerable efforts to strengthen the evidence base for its policy proposals. Adhering to the “evaluate first” principle, any proposal to revise an important existing regulation should be supported by a robust ex post evaluation of the performance of the existing regulation. Since the implementation of the 2015 Better Regulation Package, major ex post evaluations and reviews have been subject to quality control by the Regulatory Scrutiny Board, therefore improving oversight of ex post evaluations. The Better Regulation Guidelines<sup>12</sup> outline the principles that the European Commission follows when preparing new initiatives and proposals and when managing and evaluating existing legislation. As part of this Better Regulation agenda, DG Competition conducts for every regulatory text that it plans to revise ex post evaluation exercises.

17. As regards the evaluation of competition enforcement activities, the previous Principal Adviser for ex post economic evaluation F. Ilzkovitz and her team have conducted a number of interesting ex post evaluations and laid strong methodological foundations. In 2020, F. Ilzkovitz together with A. Dierx edited a reference book discussing the methods of ex post evaluation and summarising the various ex post evaluations initiated by DG Competition since 2014.

18. In 2021, Executive Vice President Vestager encouraged DG Competition to further step up its ex post evaluation efforts. To achieve that objective and within the limits of available resources, DG Competition has started to further broaden and deepen its overall evaluation activities which are now organised around three axes:

1. the impact assessment activities which are the main subject of the present note, including the annual direct customers savings calculations and the macro-modelling work;
2. the *ex post* economic evaluation of past competition enforcement *stricto sensu*; this activity is different from the impact assessment activities under (1) above: an ex post evaluation involves the assessment, a few years after a decision (or group of decisions) has been made, of the *actual* effects of that decision, while the impact assessments subject to the present note are made for many decisions soon after their adoptions, based on simplifying assumptions and therefore only estimate the *likely* effects.<sup>13</sup> Notably, the impact assessments subject to the present note assume the enforcement decisions taken by the authority to be correct (i.e. not suffering from Type I or Type II error), whereas the purpose of *ex post* evaluation is precisely to verify this claim;

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<sup>11</sup> Banerjee, Duflo, and Kremer were awarded the Nobel Memorial Prize in Economic Sciences in 2019 for their experimental approach to assessing public policy interventions.

<sup>12</sup> European Commission (2021), Better Regulation Guidelines, available at [https://commission.europa.eu/law/law-making-process/planning-and-proposing-law/better-regulation/better-regulation-guidelines-and-toolbox\\_en](https://commission.europa.eu/law/law-making-process/planning-and-proposing-law/better-regulation/better-regulation-guidelines-and-toolbox_en)

<sup>13</sup> See the introduction to the 2014 OECD Guide for helping competition authorities to assess the expected impact of their activities.

3. exploratory research on the state of competition in the EU, which intends to collect data and evidence on the functioning of competition in EU and worldwide markets; contrary to the activities under two previous headings the focus of this work-stream is not on competition enforcement but on the broader question of the measurement<sup>14</sup> and functioning of competition in the EU.
19. Some of the ongoing activities under each of the three headings are briefly described in the Table 1:

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<sup>14</sup> OECD (2021), Methodologies to measure market competition, OECD Competition Committee Issues Paper, <https://oe.cd/mmm>

Table 1. Evaluation activities in DG Competition

Main pillars	Impact Assessment	Ex post evaluation studies	Exploring the state of competition in the EU
<b>Main activities / On-going projects</b>	<ul style="list-style-type: none"> <li>Annual assessment of direct customer savings<sup>15</sup> resulting from competition policy enforcement.</li> <li>Collaboration with JRC/ECFIN to model the macroeconomic impact of DG Competition decisions.<sup>16</sup></li> <li>Exploring the scope for minimum alignment on methodology and aggregation for customer savings estimation within the ECN.</li> <li>Forthcoming: Survey study on the deterrent effects<sup>17</sup> of competition policy enforcement (final report planned for 2024).</li> </ul>	<ul style="list-style-type: none"> <li>Mergers entry study<sup>18</sup> (final report planned for 2024): before and after analysis of a sample of merger decisions, retrospectively evaluating DG Competition's expectations concerning market entry, expansion and imports.</li> <li>"Killer acquisitions" in the pharmaceutical sector<sup>19</sup> (final report planned for 2024): sectoral study seeking to establish a stronger factual basis for the debate and evaluating the effectiveness of DG Competition past enforcement and rules in mergers and antitrust in the pharma sector</li> <li>Effectiveness of Antitrust remedies (final report planned for 2024)<sup>20</sup>: study evaluating the effectiveness of antitrust remedies in a sample of past significant cases.</li> </ul>	<ul style="list-style-type: none"> <li>OECD study examining the evolution of industry concentration, mark-ups, industry dynamics, and potentially malfunctioning sectors in the EU.</li> <li>Study with an external contractor<sup>21</sup> (final report planned for 2023) on (1) price-concentration relationships in selected sectors (2) superstar firms (3) EU export champions (4) the costs of non-competition.</li> <li>In-house study on market concentration in consumer-facing (B2C) markets using Euromonitor data.</li> <li>In-house study on the effectiveness of State aid during the Covid-19 crisis.</li> </ul>
<b>Objectives</b>	<ul style="list-style-type: none"> <li>Improve transparency and accountability for stakeholders.</li> <li>Reinforce advocacy and communication efforts regarding the benefits of competition policy interventions.</li> <li>Assess whether the benefits of competition policy enforcement exceed the associated costs.</li> </ul>	<ul style="list-style-type: none"> <li>Assess the effectiveness of enforcement decisions by determining the extent to which competition authorities' actions have achieved their intended goals.</li> <li>Provide constructive and realistic recommendations on how to improve the enforcement practices.</li> <li>Obtain valuable data and insights for policy development, enforcement priorities, advocacy, and communication.</li> </ul>	<ul style="list-style-type: none"> <li>Contribute to the policy and economic discussions on the state of competition in the EU and worldwide, such as the ongoing debates on the policy implications of possibly increased market concentration in the EU, and the interplay between competition policy and industrial policy.</li> </ul>

### 3. DG Competition's annual assessment of the direct customer savings generated by its antitrust and merger enforcement

20. Since 2012, DG Competition has developed and refined a methodology to estimate the direct benefits of DG Competition's competition enforcement decisions using the

<sup>15</sup> Competition Policy Brief (2022), available at <https://data.europa.eu/doi/10.2763/80601>

<sup>16</sup> European Commission (2023). *Modelling the macroeconomic impact of competition policy – 2022 update and further development*, Publications Office of the European Union. <https://data.europa.eu/doi/10.2763/88317>

<sup>18</sup> Call for tender's details: <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=7775>

<sup>21</sup> Call for tender's details: <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=11819>

customer savings approach.<sup>22</sup> As explained above, initially these calculations covered cartel and merger enforcement only. As of 2022, they cover also non-cartel antitrust enforcement. The method adopts a bottom-up approach, mostly in line with the OECD's suggestions<sup>23</sup>, to determine the aggregate effects of EU merger, cartel and non-cartel antitrust decisions adopted in any given year, while relying on some methodological extensions and adjustments where possible and useful.

### 3.1. Methodology

#### 3.1.1. Coverage

21. The enforcement decisions for which direct customer savings are calculated consist of the following:

- Cartel prohibition decisions under Article 7 of Reg. 1/2003.<sup>24</sup>
- Non-cartel antitrust decisions (hereafter 'antitrust decisions'). This category includes prohibition decisions based on Article 7 of Regulation 1/2003 and commitment decisions based on Article 9 of Regulation 1/2003. In addition, "informal interventions" are included, *i.e.* DG Competition decisions to close a case after the investigation led to the termination of the conduct of concern and/or sufficient remedies were applied.<sup>25</sup>
- Merger interventions, which include phase II prohibitions, phase II clearances subject to remedies, phase II abandonments and phase I clearances subject to remedies. Since 2017, the calculation includes phase II abandonments provided that there is no evidence the merger was withdrawn exclusively for other, clearly identifiable reasons than the potential competition concerns raised by DG Competition which led to an in-depth investigation. If there is no such evidence, it is assumed that DG Competition's investigation has likely contributed to avoiding a price increase.<sup>26</sup>

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<sup>19</sup> Call for tender's details: <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=7774>

<sup>20</sup> Call for tender's details: <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=11835>

<sup>21</sup> Call for tender's details: <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=11819>

<sup>22</sup> Competition Policy Brief (2022), Customer savings generated by the Commission's antitrust and merger enforcement: a 10-year perspective, Issue 1, October 2022, European Commission, available at

<https://data.europa.eu/doi/10.2763/80601>

<sup>23</sup> OECD (2014). Guide for helping competition authorities assess the expected impact of their activities, available at <https://www.oecd.org/daf/competition/Guide-competition-impact-assessmentEN.pdf>

<sup>24</sup> As described in section 3.2 below, DG Competition assumes that such decisions generated customer savings only if the cartel terminated less than three years before DG Competition started the investigation.

<sup>25</sup> See below section 3.2. The same rule as for cartels terminated before the Commission started its investigation (cf. previous footnote) is applied to non-cartel antitrust decisions.

<sup>26</sup> Cf. A. Dierx and F. Ilzkovitz (2020). Ex-Post Economic Evaluation of Competition Policy: the EU Experience (Kluwer), Ch. 11.



22. In line with the OECD guide<sup>27</sup>,
- Deterrent effects are not considered in the estimations of direct customer savings. While likely more significant than the direct effects they are not as easily measurable.
  - Dynamic and non-price effects are also not considered. While interventions of competition authorities can have also significant non-price effects *e.g.*, on innovation, quality and choice, their quantification is typically even more difficult than the one of the deterrent effects. Hence, for customer savings calculations only static price effects of the respective intervention are taken into account.

### 3.1.2. Main principles

23. DG Competition relies upon the following seven principles presented in the OECD guide<sup>28</sup>, see the following Table 2.

**Table 2. OECD and DG Competition principles for customer savings estimation**

OECD principles	DG Competition principles
<i>Whenever possible, use case specific information.</i>	DG Competition estimates customer savings based on case specific information for merger, cartel and non-cartel antitrust interventions where possible, supplemented with assumptions based on the relevant economic literature.
<i>Assume that no intervention<sup>29</sup> would have had a negative impact.</i>	This is a key assumption in all DG Competition's customer savings calculations.
<i>Estimate static consumer benefits and when possible, also include dynamic ones such as an increase in innovation etc.</i>	To keep the calculation simple, DG Competition does not include dynamic consumer benefits. For all non-cartel antitrust interventions between 2012 and 2021 DG Competition has however used a questionnaire sent to case teams for establishing descriptive statistics on the number of decisions likely to have positive effects on innovation and quality. These statistics suggest that in non-cartel antitrust cases positive effects on innovation and quality are more frequent than in merger or cartel enforcement cases.
<i>Calculate and publish the estimates regularly.</i>	DG Competition publishes the estimates annually as part of the Annual Activity Report and recently also in the main Competition Policy Report. <sup>30</sup>
<i>Present the results both as an annual figure and as an annual moving average over three years.</i>	DG Competition reports both annual figures as well as figures over a longer period. In DG Competition's recent Competition Policy Brief dedicated to the calculation of customer savings, a 10-year period is used. <sup>31</sup>
<i>Present the results by type of decisions (for example, separate the estimated impact of cartel decisions from that of merger decisions) as long as there is no conflict with confidentiality.</i>	DG Competition publishes the results by type of decisions (merger, cartel and non-cartel antitrust) as well as by economic sector following the NACE Rev.2 classification. DG Competition does not publish customer savings estimates for individual cases as the customer savings generated by an individual decision are inevitably relatively uncertain and as the value of the exercise comes mainly from the "law of large numbers" and thus the publication of aggregate figures.
<i>Give "point" estimates within a range of plausible values.</i>	DG Competition expands on this and reports the customer savings in ranges, which account for the (inevitable) degree of uncertainty about the average magnitude of the true effect.

<sup>27</sup> Cf. OECD (2014).

<sup>28</sup> Cf. OECD (2014).

<sup>29</sup> Essentially the counterfactual to the assessed intervention.

<sup>30</sup> Annual Activity Report (2021), DG Competition, available at [https://commission.europa.eu/publications/annual-activity-report-2021-competition\\_en](https://commission.europa.eu/publications/annual-activity-report-2021-competition_en)

<sup>31</sup> Cf. Competition Policy Brief (2022), quoted above.

### 3.1.3. General rule to calculate the customer savings

24. In line with the OECD's guide, DG Competition estimates the total direct customer savings for each single decision as the product of the size of the affected turnover<sup>32</sup>, the price increase avoided and the expected duration of the avoided price increase if the competition authority had not intervened:

$$\text{Total Customer savings} = \text{Affected Turnover} \times \text{Price increase avoided} \times \text{Expected duration of avoided price increase}$$

25. One extension of the OECD guideline is that assumptions on the avoided price increase are given in ranges with upper and lower bounds sometimes differing from those indicated in the OECD guide. These intervals, as well as their upper and lower bound are intended to account for both (1) different assumptions in the literature<sup>33</sup> and (2) the inherent uncertainty about the average magnitude of the true effect.<sup>34</sup> Table 3 summarises the main assumptions used by DG Competition and the OECD.<sup>35</sup>

**Table 3. Assumptions on the components of total customer savings**

	Merger		Cartel		Antitrust	
	DG COMP	OECD	DG COMP	OECD	DG COMP	OECD
<b>Affected turnover</b>	Annual turnover of <b>all firms</b> in the affected market(s)	Ex-ante turnover of <b>all firms</b> in the affected market(s)	Annual turnover of the <b>companies under investigation</b> in the affected market(s)	Ex-ante turnover of the <b>companies under investigation</b> in the affected market(s)	Annual turnover of the <b>companies under investigation</b> in the affected market(s)	Ex-ante turnover of the <b>companies under investigation</b> in the affected market(s)
<b>Avoided price increase</b>	3-5%	3%	10-15 %	10%	5-10% unless case-specific information is available	5%
<b>Expected duration of the price effect</b>	2/3/5 years depending on case specific information	2 years	1/3/6 year(s) depending on case specific information	3 years	1/3/6 year(s) depending on case specific information	3 years

#### *Avoided price increase*

26. For merger interventions, DG Competition uses both a lower and a higher upper bound to depict a range of likely price increases avoided, rather than the OECD single

<sup>32</sup> In line with the guidance of the OECD the affected turnover in cartel and non-cartel antitrust cases is the turnover of the firms under investigation in the affected market while in merger cases it is the turnover of all firms in the affected market (see also below).

<sup>33</sup> Cf. Havell, R., Mariuzzo, F., & Ormosi, P. (2020). A Review of Merger Decisions in the EU. In: Dierx and Ilzkovitz (2020, eds.), quoted above; Boyer and Kotchoni, How Much Do Cartel Overcharge? *Review of Industrial Organization*, 2015, vol. 47, issue 2, 119-153.

<sup>34</sup> Cf. Dierx and Ilzkovitz (2020).

<sup>35</sup> OECD Guide (2014); Dierx and Ilzkovitz (2020).

figure recommendation within a range of plausible values.<sup>36</sup> The expected price increase avoided by prohibition decisions or approval decisions with remedies is 3% (lower bound) and 5% (upper bound). DG Competition's lower bound for mergers equals the OECD's expected avoided price increase. The upper bound and the range overall are in line with findings in the literature but remain rather conservative as a measure of the expected price increase from a merger requiring DG Competition's intervention. A review of some merger decisions in the EU shows an average price effect of 5% even for approved mergers which makes it possible or even likely that the avoided price effects for mergers subject to an intervention could be even higher.<sup>37</sup>

27. For cartel prohibitions the avoided price increase is considered to be equivalent to the increase in price due to cartel formation typically observed in the past (avoided overcharge). Similar to merger decisions, DG Competition uses both a lower and a higher upper bound to depict a range of likely price increases avoided, rather than the OECD single figure recommendation. The overcharge is assumed to be between 10% (lower bound) and 15% (upper bound), the former coinciding with the OECD single figure recommendation.<sup>38</sup> These ranges tend to be conservative in comparison to evidence in empirical literature on price overcharges for cartels. Much of the empirical work on the impact of cartel policy enforcement has tried to estimate an order of magnitude for cartel overcharges. The more recent empirical literature suggests a median price overcharge for cartels varying between 15% and 25%.<sup>39</sup> It is important to note that these estimates are based on detected cartels. As the overcharges of non-detected cartels are unknown, the estimate may suffer from selection bias<sup>40</sup>.

28. For non-cartel antitrust interventions, in principle, the avoided price increase is equivalent to the price increase attributed to the corresponding antitrust infringement. In line with merger decisions and cartel prohibitions, DG Competition uses both a lower and a higher upper bound to depict a range of likely price increases avoided, rather than the OECD single figure recommendation. The 5% avoided price increase proposed by the OECD for abuse cases being rather conservative, DG Competition has opted to also use an upper bound inspired by the practice of other competition authorities. In the absence of case-specific information, DG Competition assumes an avoided increase in prices or overcharge in a range between 5% and 10%. However, in a considerable number of occasions, the case file contained case-specific information, allowing to indicate a case-specific price effect, not only for abuse cases under Article 102, but also for cases concerning agreements and concerted practices under Article 101.

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<sup>36</sup> Cf. OECD (2014).

<sup>37</sup> Havell et al. (2020), quoted above.

<sup>38</sup> Cf. Competition Policy Brief (2022).

<sup>39</sup> For instance, based on a meta-analysis of cartel overcharge estimates, Boyer and Kotchoni (2015), quoted above, report a mean overcharge of 15.47%. Laborde (2019) reports a median cartel overcharge of 15% in a sample of cases judged by the European Commission and European NCAs, cf. Laborde, J. F. (2019). Cartel damages actions in Europe: How courts have assessed cartel overcharges. *Law & Economics, Concurrences*, (4-2019). Connor and Lande (2023) report that in their database of cartels, median average overcharges since 1999 appear to hover in the 20% to 23% range. J. Connor and R. Lande (2023), *The Prevalence and Injuriousness of Cartels Worldwide*. Elgar Research Handbook on Cartels (P. Whelan editor; Edward Elgar Publishing Ltd, United Kingdom, 2023 Forthcoming).

<sup>40</sup> Cf. Dierx and Ilzkovitz (2020), quoted above, Chapter 11.

*Expected duration of the avoided harm*

29. For merger interventions the length of time the increased price would have prevailed, if DG Competition had not intervened are assessed on a case-by-case basis by the case teams based on a questionnaire and checked by the relevant case support and policy unit. The overall question to be answered by the case team is the following: how long would it have taken for the market to self-correct and restore the market to conditions of competition similar to those in place before the merger transaction took place? The response to this question depends on the importance of barriers to entry and expansion in the market(s) concerned. For the purpose of the customer savings exercise, DG Competition evaluates the significance of such barriers to entry by means of a questionnaire based on 12 indicators. The 12 indicators are (1) recent entry, (2) churn rate, (3) imports from outside the geographical market, (4) need for an authorization to enter, (5) market regulation, (6) network effects, (7) supply chain linkages, (8) economics of scale in production, (9) fixed costs as a share of total costs, (10) presence of branded products, (11) Investments in R&D and innovation and (12) demand growth. For each indicator, the merger can be assigned a score of [0, 1, 2] resulting in an aggregate score that ranges in the interval [0, 24].<sup>41</sup>

30. On that basis, a distinction is made between barriers to entry in the affected market and the related expected duration of the avoided price increase as follows.

- “Some barriers” - with barriers to entry equals 2 years,
- “Significant barriers” – with barriers to entry equals 3 years, and
- “Extremely significant” - with barriers to entry equals 5 years.<sup>42</sup>

31. As regards merger decisions affecting multiple markets with different levels of entry barriers the rule of thumb in the practice of DG Competition is to assign a single duration to each merger case. Nevertheless, exceptions may apply and in some specific cases, multiple durations can be used for a given case in order to reflect the substantial differences in the entry barriers between different affected markets.

32. In comparison, the OECD suggests a (default) 2-year duration for mergers if no more specific information is available. The refined time ranges by DG Competition have the potential advantage to reflect more closely findings in the literature, showing evidence for the chosen medium point and the upper bound<sup>43</sup> and to take into account the specificities of the merger case concerned.

33. For cartel prohibitions the key question is how long the cartel and its effects would have lasted in the absence of the Commission’s intervention.

34. To estimate the remaining duration of a cartel if it would have continued in the absence of intervention, information from case teams is collected on a case-by-case basis on (1) a number of indicators of cartel stability (forward looking) and (2) the historical duration of the cartel.

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<sup>41</sup> Cf. Dierx and Ilzkovitz (2020), Chapter 11.

<sup>42</sup> Ibid.

<sup>43</sup> Ormosi et al. (2020), quoted above, report the peak of price change after 2-3 years post-merger; Gugler et al. (2003) finds the merger’s market power effect (and its effect on prices) to last five years. Cf. Gugler, K., Mueller, D. C., Yurtoglu, B. B., & Zulehner, C. (2003). The effects of mergers: an international comparison. *International Journal of Industrial Organization*, 21(5), 625-653.

35. For the first element the analysis seeks to establish scores on a number of indicators of cartel stability, to calculate a stability score used as an informative tool to determine the expected duration. The rationale behind this approach based on cartel stability indicators is that cartel members evaluate on a regular basis whether there are (still) incentives to continue being part of the cartel or leaving the cartel.<sup>44</sup>

36. The cartel stability indicators used by DG Competition are (1) the number of cartel participants, (2) the cartel's market share, (3) the symmetry of the member's market shares, (4) the presence of structural links such as cross-shareholdings or interlocking directorships, (5) product characteristics facilitating coordination, (6) entry barriers, (7) trends in demand, (8) buyer power, (9) transparency, (10) the ability to react in a timely way to deviations, and (11) interactions between the cartel members in other markets (multi-market contacts).

37. Based on these indicators, an aggregate score of cartel stability is calculated for each cartel. It is calculated as the sum of the 11 indicators of cartel stability, which reflect the case team's judgement on a scale of [0,1,2] of the different elements contributing to the stability of the cartel.

38. In DG Competition's experience, stability scores appear to be more relevant in the assignment of the likely future duration of cartels than their historical durations. The correlation between historical durations and stability scores, while positive, is moderate. To account for both factors in the customer savings calculation for cartels, a weighted average total score is calculated by assigning 65% weight to the stability score given by the evaluation team and 35% to the historical duration of the cartel.

39. DG Competition uses the weighted total score – constructed on the stability score and historical duration – to guide the choice of the likely duration of cartels.

40. On that basis, cartels are classified into three categories:

- “Unsustainable cartels” with a corresponding likely duration of 1 year
- “Fairly sustainable cartels” with a corresponding likely duration of 3 years
- “Very sustainable” with a corresponding likely duration of 6 years

41. By contrast, the OECD suggests a 3-year duration in cartel cases if no specific information is available.<sup>45</sup>

42. As regards the duration of the positive effects of non-cartel antitrust interventions DG Competition usually assumes – in line with OECD guidance – that those positive effects will last on average 3 years because in the longer run market power tends to erode even without its intervention as a result of (technological) substitution, entry, expansion or imports.

43. Moreover, DG Competition uses case-specific information whenever possible and collects more precise information about the duration of the decision's positive effects from case teams. In a number of cases, DG Competition has accepted the arguments from the case teams that the expected duration of the effects of the antitrust interventions would substantially exceed the standard period of 3 years when the information provided by case teams point to a longer duration of the effects of antitrust interventions.

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<sup>44</sup> Dierx and Ilzkovitz (2020), Chapter 11.

<sup>45</sup> OECD (2014).

*Calculation of the affected turnover*

44. For merger interventions, in line with OECD guidance<sup>46</sup>, the calculation of customer savings is based on the total size of the relevant market (including the sales of the competitors of the merging parties in the same relevant market(s)). Taking the value of the entire market is justified by the observation that the price effect of a merger is unlikely to be confined to the merging parties and more likely to have repercussions on the prices in the entire relevant market.<sup>47</sup> Affected markets are defined as the markets of concern to the European Commission during its investigation of the merger proposed.

45. For cartel prohibitions, contrary to the calculation of customer savings from merger cases, the affected turnover is based on the value of the parties' turnover, as (1) a cartel may not affect the prices of outsiders and (2) only the turnover of the parties is readily available in the case file (no need to calculate market shares and market size as in mergers). This approach is in line with OECD guidance.<sup>48</sup> The information on the value of annual turnover in the affected market(s) by the companies under investigation are obtained from the units that are responsible for the case investigation. For cartel decisions, the annual value of sales is typically used to calculate the amount of the fine, hence it can be used as an input into the customer savings calculations as well.

46. For non-cartel antitrust interventions, in line with the guidance of the OECD for the measurement of the affected turnover, DG Competition conservatively only takes into account the annual value of sales in the affected market(s) by the companies under investigation, again assuming that in the absence of the antitrust decision only the companies under investigation would have imposed higher prices.<sup>49</sup> This information is normally found in the case file. For prohibition decisions, the annual value of sales used to calculate the amount of the fine is used as an input into the customer savings calculations as well.

47. However, information collected from antitrust case teams includes information on the possibility that price effects of the intervention would spread to all market players and therefore not only to the companies under investigation but also to their competitors. For some interventions, the case team has convincingly substantiated that in the special circumstances of the case at hand (notably markets with strong oligopolistic interdependencies) the sales by all market players should be taken into account.

### **3.2. Some particular methodological issues encountered by DG COMP**

48. In the experience of DG Competition, the general approach set out above may in some situations give rise to particular methodological issues which are not - or not directly - addressed in the 2014 OECD guide.

49. The following section addresses issues encountered in (1) cases in which the infringement stopped before DG Competition started its investigation, (2) cases in which the competition problem was addressed based on an informal intervention, (3) cases in which the decision is under appeal or has been later annulled by the EU Courts (General Court or Court of Justice) and (4) financial markets cases.

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<sup>46</sup> OECD Guide (2014).

<sup>47</sup> Dierx and Ilzkovitz (2020), Chapter 11.

<sup>48</sup> ECD Guide (2014).

<sup>49</sup> OECD Guide (2014).

### ***3.2.1. Infringements terminated before DG Competition started its investigation***

50. A methodological issue which has not been addressed in the OECD guide is whether interventions in cartels and non-cartel antitrust cases tackling infringements terminated *before* the authority’s investigation started, can be considered as generating direct customer savings or must be regarded as having only indirect deterrent effects. Here, one can think for example of cartel cases where a leniency applicant informed DG Competition of the illegal activities of the cartel and DG Competition started an investigation, while the cartel stopped its activities before the latter date. Another constellation is a situation where the cartel stopped its illegal activities even before the leniency applicant contacted DG Competition. It could be argued that in those cases DG Competition’s investigation did not cause any direct positive effects for customers, as the infringement stopped before the official investigation started. On the other hand, at least in some of those cases the termination of the infringement may have been caused by fear of an impending investigative action by DG COMP, for example because the parties to a cartel feared that one of the members might soon apply for leniency. In those cases, the cartel’s ending could be seen as directly linked to (and the logical consequence of) an imminent DG Competition investigation.<sup>50</sup> DG Competition considers that these cases can be included in the customer savings calculation as long as DG Competition’s intervention can be assumed to have had a direct impact on them.

51. Usually in those cases it will be difficult or impossible to find out *ex post* what exactly caused the participants in a cartel to terminate it. In order to keep the customer calculation exercise simple, DG Competition has therefore decided to take past infringements into account for both cartels and antitrust interventions, if the infringement was terminated less than three years before DG Competition started (i.e. registered) the case and otherwise not to take those cases into account.

### ***3.2.2. Informal interventions***

52. Another methodological issue, which has not been explicitly addressed in the OECD guide, is to what extent the customer savings calculations for antitrust should take into account “informal interventions” of the authority, i.e. DG Competition’s decisions to close a case after the investigation led to the termination of the behaviour of concern and/or the implementation of satisfactory remedies.<sup>51</sup>

53. DG Competition has decided to include those informal interventions in its calculations because (1) depending on the case, for a competition authority, it can be an adequate use of its limited investigative resources to close an investigation without a formal decision, if the firms under investigation abandon and/or remedy the investigated conduct; and (2) from an economic point of view such informal interventions generate the same customer savings as formal interventions.

54. In order to make sure DG Competition does not claim credit for changes of business conduct which were not triggered by its investigation, an informal intervention is only included in the customer savings calculations in those cases in which DG Competition communicated officially (e.g. in a press release or an official report) about its intervention and the causal link between its intervention and the procompetitive change of conduct. The underlying assumption is that in official documents DG Competition will claim a causal

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<sup>50</sup> Competition Policy Brief (2022), quoted above.

<sup>51</sup> Ibid.

link only when it can be certain that it really exists, as otherwise it would create a litigation risk.

### *Interventions under appeal or later annulled by the Courts*

55. In line with the OECD guide, customer savings calculations should be done on a yearly basis and cover all decisions taken during each year. In line with the same guide DG Competition includes all interventions in its calculations including those that are appealed or might potentially be appealed in the future, because at the moment of the annual customer savings calculation exercise the fate of those actual or potential appeals cannot be predicted with any certainty.<sup>52</sup>

56. The OECD guidance does however not contain express indications what to do with customer savings calculations for past years when a few years later a decision initially included in the calculations is annulled by the General Court.

57. On the one hand, it could be argued that DG Competition should in such a scenario retroactively correct customer savings calculations for the intervention year in question, because otherwise the numbers for this year contain interventions which have been found to be illegal by the General Court.

58. On the other hand, it must be borne in mind that, first, decisions initially annulled by the General Court may be confirmed on appeal by the Court of Justice and/or readopted as new decisions by DG Competition, which raises the follow-on question whether decisions retroactively removed might later have to be retroactively added again. Secondly, customer savings calculations report - as explained in the OECD guide – the expected customer savings at the moment when the savings are calculated, as opposed to the actual effects, which can only be assessed on the basis of a proper ex-post evaluation. Thirdly, these calculations should be simple, concise and transparent, there should be consistency over time and no double counting. If the customer savings figures for past years had to be changed repeatedly depending on the outcome of later court proceedings and possible re-adoptions of decisions, the customer savings calculations for past years would become unstable. Moreover, the numbers for the most recent years (which by definition do not yet reflect annulments) could not any longer be compared in a meaningful way with numbers for those past years which retroactively take into account annulments.

59. In the light of these difficulties and in line with the objectives of the customer savings calculations to keep them simple and concise, DG Competition currently does not retroactively change calculations for past years following annulments. On the other hand, in order to exclude double counting and in order to maintain consistency over time, re-adoption decisions are excluded from the calculations. Given that there are also valid arguments to exclude at least those past interventions from the calculations the annulment of which has become definitive and for which DG Competition has also decided not to reopen the file with a view to re-adoption DG Competition is pursuing its internal reflections on this challenging issue and welcomes any substantive views and opinions on the matter.

### **3.2.3. Financial market cases**

60. Since companies that operate in financial markets (e.g. banks, insurance companies, credit card companies) may have very large turnovers and transaction volumes given the nature of their business, using their turnover figures can result in (artificially) high customer

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<sup>52</sup> Competition Policy Brief (2022).



savings. In calculations of the customer savings for cartel cases this issue has been resolved by using the turnover proxies that were constructed by the case teams for the calculation of the fine. For merger cases, similar proxies can be examined.

### **3.3. Practical implementation of the customer savings estimation**

61. In order for authorities which currently do not perform customer savings calculations to get an idea of how the customer savings approach can be implemented, this sub-section reports how the annual process for collecting the data and for the calculation and reporting of the aggregate savings is organised within DG Competition. It is however important to bear in mind that the customers savings calculations in DG Competition are performed with a comparatively strong focus on case specific data (in particular, the questionnaires on entry barriers for mergers and on cartel stability for cartels). It is possible and legitimate in particular for smaller authorities to rely instead more on simplifying assumptions such as the ones in the OECD guide and thereby save resources and time.

62. Within DG Competition the customer savings calculations are organised and coordinated by the team of the Principal Adviser for ex post economic evaluation ('the PA team').

#### ***3.3.1. Collection of data from the cases team***

63. Towards the end of each calendar year or early in the new year, for every instrument, one policy officer in the instrument coordination unit ('the instrument contact point') has the task to collect the basic data necessary to determine, for each decision adopted during the calendar year, the avoided price effect, duration and affected turnover from the relevant case team that worked on the case. For that purpose, the PA team prepares (1) the excel sheet that the 'instrument contact point' has to fill in to report on all the cases for the instrument (based on the input it receives from the case teams) and (2) an accompanying questionnaire to the case teams. The PA team does plausibility checks on the figures submitted and asks questions to the instrument coordinator, but the instrument coordination unit has the ultimate responsibility for the accuracy of the figures which it submits to the PA team.

#### ***3.3.2. Estimation of the customer savings by the PA team and publication***

64. The PA team uses the data and inputs from the instrument contact points to determine for each case duration, avoided price increase and the affected turnover and calculates on this basis the customer savings for each decision. It then aggregates the results and produces aggregate statistics per instrument and per sector. The next step is to provide the figures to Senior management and the team working on the Competition Policy Report and the Annual Activity Report for publication. As discussed below, the figures have been not just used for the Annual Activity Report (primary purpose) but also for an estimation of the macro-economic effects of DG Competition enforcement (See Section 4).

#### ***3.3.3. Resources required***

65. For each case team to fill out the questionnaire for each case takes on average around one (1) day of a Full Time Equivalent ('FTE') staff member. As the decisions have been adopted recently, the case teams are normally well familiar with the case. It takes for the merger instrument coordinator probably 3 to 5 FTE days (around 20 cases per year) to collect the information from all the case teams. For the antitrust and cartel coordinators, this is 2 to 4 FTE (less cases). For the PA team to check the figures submitted for errors and plausibility, go back to the case teams and case coordinator, calculate the customer

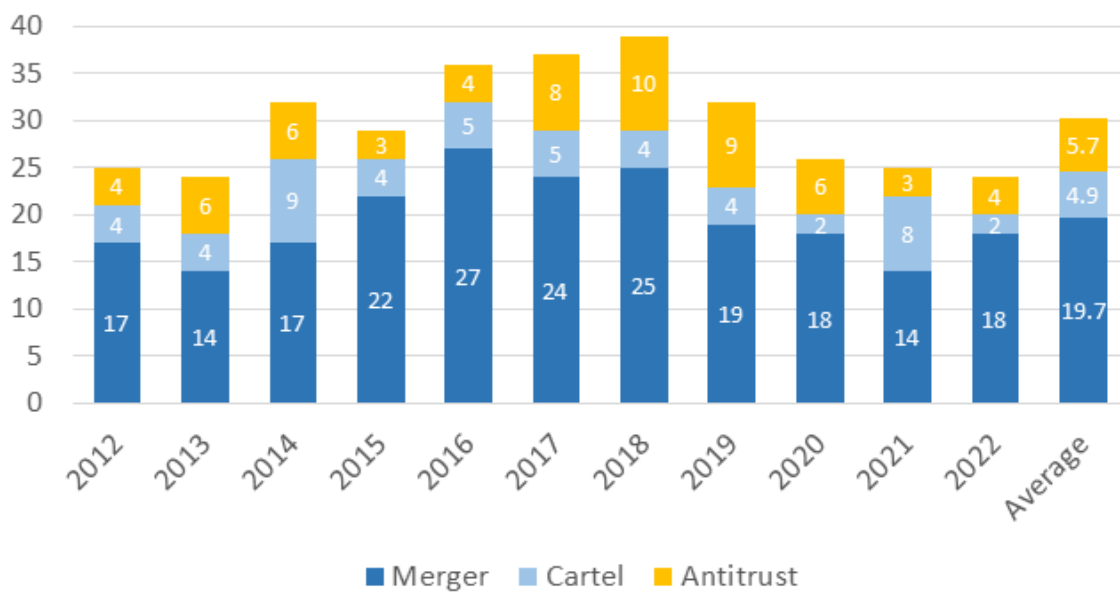
savings, prepare the descriptive statistics and work on various materials presenting the figures takes around 15 FTE days.

### 3.4. Results of the customer benefits estimations for the period 2012-2022

66. For illustrative purposes we report below the results of the customer savings estimations for the period 2012 to 2022.

67. Over the past 11 years the average number of Commission interventions was around 30 per year. The majority of interventions were in the area of merger control, followed by interventions in the areas of non-cartel antitrust and cartels.

Figure 1. Number of interventions (2012-2022)



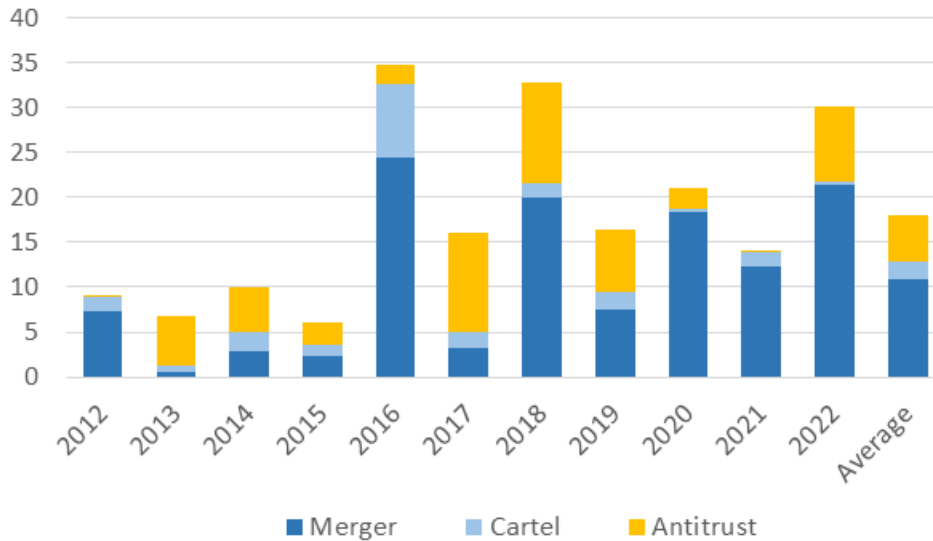
68. For the eleven years under consideration, the estimated total customer savings from all interventions under the three instruments were in a range of EUR 145 to 245 billion, depending on the lower or upper bound assumptions made for the price effects of the different interventions. The average annual direct customer savings were thus in a range of EUR 13 to 22 billion.

69. The annual direct customer savings vary considerably from year to year. They were particularly high in 2016 and 2018, given the number and specific characteristics of the interventions in those years. It is therefore important to consider longer time frames (as in this section: an 11-year period) or moving averages, as recommended by the OECD guide, or both.

70. Average annual direct customer savings from mergers, cartels and non-cartel antitrust ranged respectively from EUR 8 to 13, 1.5 to 2.5 and 3.5 to 6.5 billion. On average, annual customer savings from mergers are thus larger than those from non-cartel antitrust interventions. This difference reflects in large part the differences in the number of interventions made over the 2012 to 2022 period, which varies between 51 in cartels, 63 in antitrust and 215 in mergers.

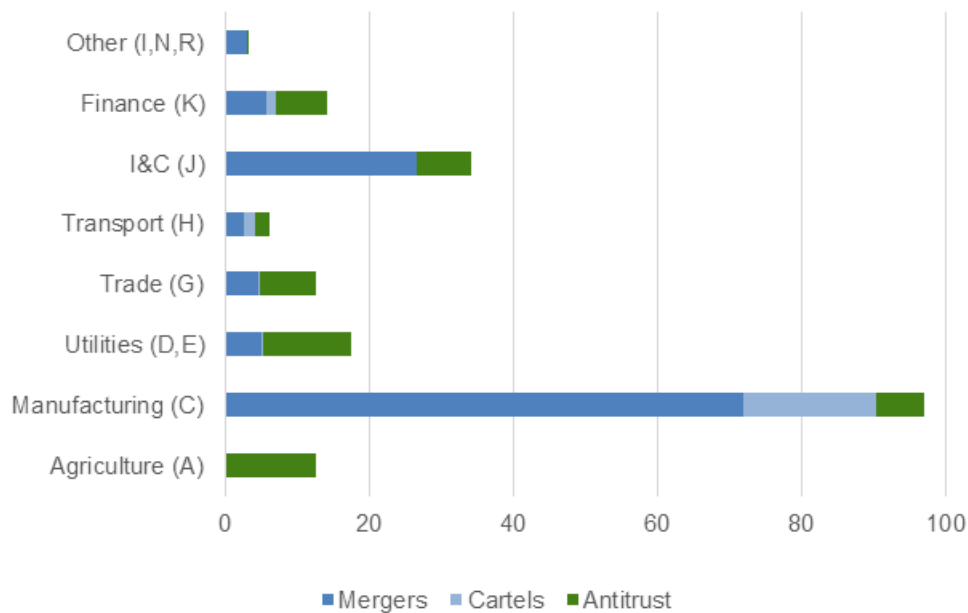
71. By contrast, the customer savings associated with ‘average’ individual antitrust intervention (EUR 0.6-1 billion) lie above those recorded for an average cartel prohibition (EUR 0.3-0.5 billion) or merger intervention (EUR 0.4-0.6).

**Figure 2. Customer savings by instrument (2012-2022) in billion EUR (midpoints)**



72. The figure below illustrates the distribution of customer savings by sector and enforcement instrument. It shows that the customer savings from non-cartel antitrust interventions took place over a wide range of sectors, with particularly large savings in the agricultural (i.e. mainly food) and utility (i.e. mainly energy) sectors which are particularly important for consumers. Customer savings from merger interventions are more concentrated in the Manufacturing and Information & Communication sectors. The customer savings from cartel enforcement are mainly concentrated in the manufacturing sector with some further savings in the financial services sector. About 46% of the overall savings were realised in the manufacturing sector, where many sectors with high fixed costs are relatively concentrated and thus more prone to competition problems.

Figure 3. Customer savings by sectors (2012-2022) in billion EUR



### 3.5. Cooperation within the ECN

73. The Commission and national competition authorities (NCAs) within the EU cooperate, share work and coordinate their respective actions in the fields of cartel, antitrust and merger enforcement. By contrast, until recently they did not cooperate as regards the quantification of the benefits of that enforcement.

74. Up to now the Commission only reports those enforcement actions which it has taken itself without taking into account the enforcement actions from NCAs to which it may have contributed or which may be based on EU rules. Those NCAs reporting customer savings also currently report only their own enforcement actions without taking into account enforcement action conducted by the Commission affecting their jurisdiction and/or on which they may have cooperated with the Commission. This means that both NCAs and the Commission are probably underreporting the benefits of the ECN's overall enforcement for their respective jurisdictions because each one is only reporting a part of that enforcement.

75. There is therefore an opportunity for more cooperation and possibly the calculation and reporting of aggregate figures for the ECN as whole.

76. In order to make progress towards a minimum alignment of methodologies and possibly to aggregate calculations of customer savings for the ECN as a whole, DG Competition has organised two ECN workshops in November 2021 and February 2023 and discussed with interested NCAs a potential path for increased cooperation. A further workshop will likely take place and potentially some first results could become available in the course of 2024.

#### 4. Estimating the macroeconomic impact of competition enforcement

77. The recently published report<sup>53</sup> on “Modelling the Macroeconomic Impact of Competition Policy: 2022 update and further development”, a joint work by DG COMP, the JRC and DG ECFIN, provides an update of the macro-model simulations of the impact of competition policy interventions of the European Commission.

78. The report uses data from the Commission’s competition policy interventions (i.e., merger interventions, cartel prohibitions as well as antitrust interventions other than cartels) over the period 2012-2021, as collected by DG Competition for its annual Customer Savings calculations. The report serves as an update to the 2020 and 2021 reports, which were also published on the website of DG Competition in previous years.

79. The report estimates the macroeconomic impact of the Commission’s competition enforcement with the help of two models.

80. The first model, QUEST III, is the Commission’s basic macro-economic forecasting model used for example in the context of the European semester exercise. It allows to evaluate the impact of competition policy enforcement on economy-wide measures of performance such as GDP, employment, prices and productivity.

81. The latest Quest III model simulations are based on a 1.17 percentage point reduction in mark-ups resulting from the Commission’s competition policy interventions.

82. The impact of competition enforcement on mark-ups includes both the direct price effects of the Commission’s competition policy interventions (as captured by the annual customer savings estimation) and the indirect, deterrent effects of these interventions. The deterrent effects of the Commission’s competition policy interventions have for the first time for this report been simulated using a novel mathematical approach (making use of the so-called Bass function), described in a recent paper.<sup>54</sup>

83. According to the simulation, the reduction in mark-ups, applied to the existing (calibrated) economy wide mark-up level of 13.56 percent in the steady-state of the QUEST III model, triggers an increase of real GDP relative to the baseline in the range of 0.6% - 1.1% in the medium to long term (= the equivalent of an uplift of EUR 80 - 150 billion in 2019 GDP), as well as a 0.3% - 0.7% reduction in the overall price level.

84. As shown in the table below all the main components of aggregate demand increase. More specifically, after 5 years, the results suggest an increase in consumption (0.5%) and investment (1.1%) despite the decline in profits (of about 9.5% - 11.5%) associated with the negative mark-up shock. Investment is increasing because the negative direct effect of mark-ups on future profitability is more than offset by the positive effect of the increasing demand due to the lower prices.

**Table 4. Results of the QUEST III macro-model based on 2012-2021 Commission’s interventions**

	Percentage point change in the medium to long term
<b>GDP</b>	<b>0.6 to 1.1</b>

<sup>53</sup> European Commission (2023). *Modelling the macroeconomic impact of competition policy – 2022 update and further development*, Publications Office of the European Union. <https://data.europa.eu/doi/10.2763/88317>

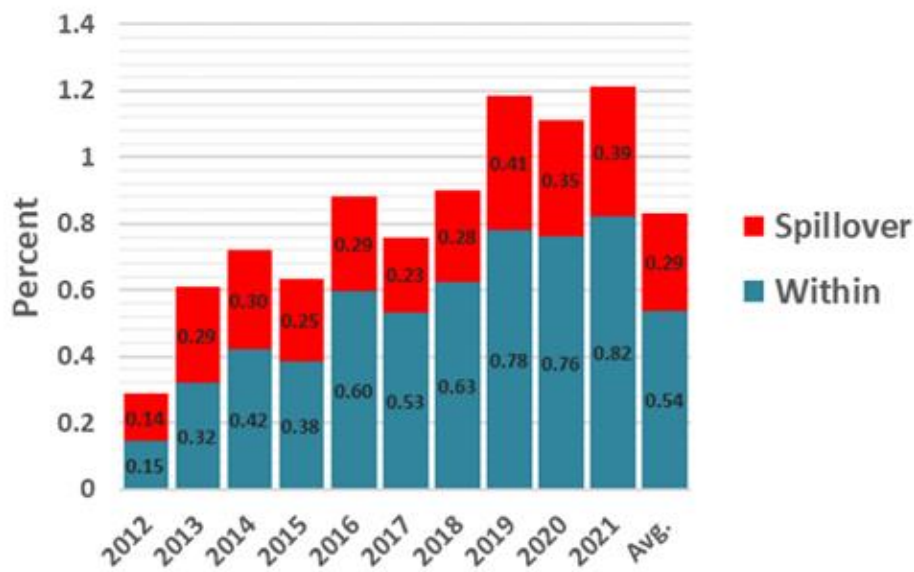
<sup>54</sup> Dierx, A., Ilzkovitz, F., Pataracchia, B., & Pericoli, F. (2023). Modelling the diffusion of the deterrent effects of competition policy. *Journal of Competition Law & Economics*.

<b>GDP deflator</b>	-0.3 to -0.7
<b>Consumption</b>	0.5 to 1.0
<b>Investment</b>	1.1 to 1.7
<b>Labour productivity</b>	0.2 to 0.6
<b>Employment</b>	0.4 to 0.5

85. Similar to how competition policy interventions are mapped onto the QUEST III model, mark-up shocks can also be applied to an EU27 input-output model. The input-output model analyses how the price effects of competition policy interventions are transmitted across sectors using information on economic interdependencies retrieved from an input-output table of the European Union.

86. On average, according to this second modelling exercise, the Commission’s competition policy enforcement is estimated to lower prices by around 0.83% and slightly higher when considering recent years (See Figure 4 below). Two-thirds of the overall effect can be attributed to the “within-sector price-effect”, which includes both the direct and deterrence effects of competition policy interventions on that sector, in a manner consistent with the analysis conducted with the QUEST III macro-model. The remaining part, i.e., the “spill-over price effect”, results from amplification of this impact due to the input-output channels between sectors.

**Figure 4. Impact of Competition Policy Enforcement on the Overall Price Level**



### 5. Forthcoming study on the deterrent effects of competition enforcement interventions

87. The strengths of the direct customer savings approach are that (1) the calculation method is simple, (2) the underlying assumption are conservative and contribute thereby to the credibility of the exercise, (3) the collection of the underlying data-points and the calculations can be done at relatively low cost of resources and retroactively to create longer time series, (4) due to the “law of large numbers”, aggregate figures probably provide relatively robust ranges of outcomes and therefore a good idea of the order of magnitude of the true savings.

88. However, the main limitation of direct customer savings approach is that it likely significantly underestimates the true benefits of competition enforcement as it does not take into account any effects beyond the direct price effects and, notably, the deterrent effects of enforcement actions.

89. Interventions by competition authorities aim not only at halting the anticompetitive behaviour of market participants (direct effect), but also at preventing or reducing in severity future anticompetitive actions (deterrent effect), both by the parties directly affected by these interventions and by other market participants. There seems to be a consensus in the literature that the deterrent effects are considerable, indicating that measuring only direct customer savings provides only partial view of the benefits of competition policy.<sup>55</sup>

90. The deterrent effects are difficult to measure because one needs to make inferences about changes in future behaviour by market players resulting from interventions by competition authorities. Different methods have been applied in the past to estimate the deterrent effects of competition policy interventions.

91. The most common estimation approach relies on surveys that directly ask companies and their legal advisors to estimate the number of cartels/anticompetitive mergers deterred for every cartel/anticompetitive merger detected. However, the most recent surveys on the deterrent effects of merger and antitrust enforcement are more than a decade old and are limited to the Netherlands and the UK.<sup>56</sup> While being informative on the level of deterrence of the antitrust and merger enforcement of these two competition policy regimes, which are rather similar to the EU regime, they do not constitute a survey as regards the deterrent effect of the EU competition enforcement as such. Additionally, the surveys partly predate important changes in the antitrust environment such as those brought about by the implementation of the Leniency Notice and the Damages Directive, both of which may affect deterrence effects of enforcement action (notably in the field of cartels). Finally, most studies have focused on the deterrent effects of cartel decisions and merger decisions, with little specific attention to the deterrent effects of non-cartel antitrust decisions.

92. To provide a much-needed update of and improvement on the existing survey-based evidence regarding the scale of the deterrent effects of EU competition policy, DG Competition has published a call for tender<sup>57</sup> to commission a survey to be conducted by an external contractor of companies and their legal advisers. The main goal of the study is to obtain an up-to-date, realistic yet conservative lower bound estimate of the deterrent effects of the Commission's merger and antitrust interventions.

93. The survey is expected to have a EU27 coverage and aims to also identify the main factors driving the deterrent effects of various EU competition policy instruments. If successful, the result of this work will offer the additional advantage of strengthening the empirical foundation of the macroeconomic model simulations of the impact of

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<sup>55</sup> A. Dierx and F. Ilzkovitz (2020). *Ex-Post Economic Evaluation of Competition Policy: the EU Experience* (Kluwer), Chapter 12.

<sup>56</sup> SEO (2011), "Anticipating cartel and merger control", Report prepared for the NMa (Netherlands Competition Authority), January. London Economics (2011), "The impact of competition interventions on compliance and deterrence", OFT Report No. 1391, December.

<sup>57</sup> Tender for a Survey of Practitioners on the Deterrent Effects of EU Competition Enforcement <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=12403>

competition policy such as the one conducted in collaboration with the JRC and DG ECFIN, presented in Section 4.

## 6. Communicating on the impact of the Commission's enforcement activities

94. As part of DG Competition's wider communication strategy and activities<sup>58</sup> DG Competition also communicates about its impact assessment activities.

95. The annual calculations of the customer savings are published every year in the Annual Activity Report.<sup>59</sup>

96. At the occasion of the tenth yearly customer savings calculation, DG Competition published in October 2022 a competition policy brief dedicated to customer savings and covering ten years of data.<sup>60</sup>

97. The outcomes of the macro-economic modelling activities conducted jointly with DG ECFIN and the JRC are published on DG Competition's website.<sup>61</sup>

98. The outcomes of both types of impact assessment exercises have been presented by DG Competition in a poster session at a conference organised by EVP Vestager on 'Making markets work for people' in October 2022 in Brussels.<sup>62</sup>

99. In 2023 the overall results of the two impact assessments (direct customer savings and macroeconomic simulations) have also been publicised in the Competition Policy Report.<sup>63</sup>

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<sup>58</sup> See the parallel note on communication from DG Competition submitted to the same OECD roundtable.

<sup>59</sup> [https://commission.europa.eu/publications/annual-activity-report-2021-competition\\_en](https://commission.europa.eu/publications/annual-activity-report-2021-competition_en)

<sup>60</sup> Competition Policy Brief (2022), quoted above.

<sup>61</sup> [https://competition-policy.ec.europa.eu/document/d64c5f17-9bda-4a86-9adb-653ed5608174\\_en](https://competition-policy.ec.europa.eu/document/d64c5f17-9bda-4a86-9adb-653ed5608174_en)

<sup>62</sup> [https://competition-policy.ec.europa.eu/consumers/reaching-out/making-markets-work-people\\_en](https://competition-policy.ec.europa.eu/consumers/reaching-out/making-markets-work-people_en)

<sup>63</sup> [https://competition-policy.ec.europa.eu/publications/annual-reports\\_en](https://competition-policy.ec.europa.eu/publications/annual-reports_en)



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## Part 2: Promoting the benefits of competition and its rules – A view from the European Commission’s DG Competition

### 1. Introduction

100. Like most competition authorities, DG Competition’s communication efforts are rolled out based on a detailed and validated strategy, taking into account citizens’ perceptions and opinions (established via Eurobarometer surveys<sup>64</sup>) and featuring a multitude of channels and tools. The latter include political messaging (in particular through speeches and interviews), [press material](#) and press briefings, active social media presence, [publications](#) and public events in various formats.

101. In addition to communication, DG Competition puts strong emphasis on transparency: all decisions are published on its website, in most cases immediately after they are taken, and most of them are also set out in dedicated press material. More comprehensively, and also with a view to advocacy, the annual Report on Competition Policy synthesises the main events in EU competition policy in a given year 2022 and includes summaries of the Commission’s enforcement activities and policy developments<sup>65</sup>. Likewise, the Competition website features all public consultations, inquiries, studies and similar content. A project is currently under way to further enhance the availability of DG Competition’s data, including a new state-of-the art search engine for all types of data (case data, documents, statistics etc.), and subsequently the publication of all relevant data on the European Data Portal<sup>66</sup>.

102. Extensive and transparent policy guidance (complemented occasionally by explanatory videos) aims at increasing the awareness of, and the compliance with EU competition rules. Finally, DG Competition engages in continuous competition advocacy towards other Commission services as well as with other EU institutions, Member States’ authorities and private-sector stakeholders.

103. The ultimate “benefits of competition interventions” is that they help make markets work for people. Complementing the European Commission’s note submitted on 2 July 2023<sup>67</sup>, this note highlights two recent initiatives – in the fields of advocacy and of communication, respectively – telling this overarching story in their different ways. At the end, this note refers to other communication and advocacy initiatives.

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<sup>64</sup> In 2022, we conducted two Eurobarometer surveys on competition policy involving citizens (2654 / FL511) and SMEs (2655 / FL510) ([link](#)).

<sup>65</sup> The report is officially addressed to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions but it is also read with great interest by the wider competition policy community. The shorter report is accompanied by a longer Staff Working Document where the Commission describes its activities more extensively sector by sector; [https://competition-policy.ec.europa.eu/publications/annual-reports\\_en](https://competition-policy.ec.europa.eu/publications/annual-reports_en)

<sup>66</sup> This portal is run by the EU’s Publications Office; it is a central point of access to European open data from international, EU, national, regional, local and geodata portals.

<sup>67</sup> DAF/COMP/WP2/WD(2023)16

## 2. Advocacy

104. The most recent addition to DG Competition’s communications toolbox is a livestreamed discussion format: The *Let's Talk Competition* webcast series (click on the image for details).



105. The *Let's Talk Competition* debates feature speakers from DG Competition, academia, and industry/private practice. The objective is to ensure that our narrative is clearly understood by our stakeholders, and that we address any potential criticism upfront. Those debates are livestreamed, and they allow the audience to interact via a dedicated online tool; they are then stored and remain accessible on our YouTube channel.

106. The first episode (May 2023) was devoted to DG Competition’s current work to update its guidelines on exclusionary abuses. At the time of writing, more than 2,000 people have watched this episode (including 700 people during the live event itself). Several more episodes will follow in the coming weeks and months, for example on the revised Horizontal Guidelines.

107. Based on the data available so far, the *Let's Talk Competition* format has significantly increased the audience we can reach for such topics - and at very limited cost. This new format is not only effective but also inclusive, because it allows everyone – irrespective of location or financial means - to hear the views of top-level speakers and participate in the debate, without the need to travel and attend expensive conferences.

108. Other examples of advocacy include:

- Guidance papers. A notable example is last year’s Guidelines on State aid for climate, environmental protection and energy ([link](#));
- Market investigations, public consultations and sector studies, such as our sector inquiry into the consumer Internet of Things completed last year ([link](#))

### 3. Communication and outreach

109. Click on the image below to see how the many strands of our efforts to underline the economic and social benefits of competition and competition policy on people's lives came together at the large international conference Executive Vice-President Margrethe Vestager hosted in Brussels in October 2022.



110. Another new initiative that Delegations may find interesting is DG Competition's *Markets for People* debates series. The purpose is to take our story to mid-sized towns in different parts of Europe between spring 2023 and early 2024, showing national and local audiences that we strive to shorten the distance between them and DG Competition in Brussels.

111. The idea is to engage with prominent local or regional personalities and invite them to debate insights that emerged from the above-mentioned *Making Markets Work for People* conference. As Russia's war in Ukraine and Europe's cost-of-living crisis do not relent, it is still urgent to communicate on the ultimate economic and social impact of competition and competition policy on people's lives. The (re)current political debate about Europe's international competitiveness further illustrates the usefulness of this initiative.

112. Each episode's location, speakers and topics are identified together with National Competition Authorities, the Commission's Representations in EU countries, local Europe Direct centres and other local partners. In our experience, it is beneficial to adapt the high-level pro-competition messages to national/regional concerns, and to set up a debate among well-known personalities who are not linked to the Commission.

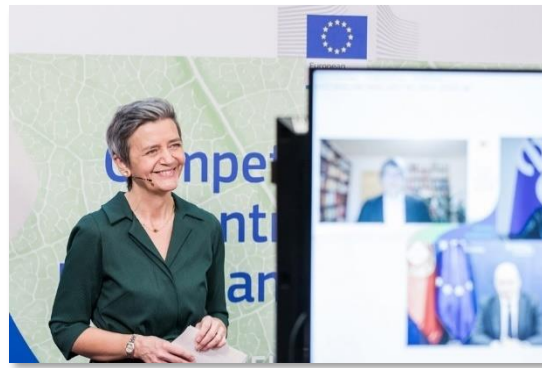
113. Remote viewers can watch the debates live and access them on demand on a series portal that we have created, which leads to a much wider audience being reached even after the event itself. DG Competition's channels are being used to give the series visibility in competition circles across the EU. For more details, please click on the image:



114. The first debate that took place in [Modena, Italy, on 20 April 2023](#) attracted roughly 200 participants (both on-site and remote). The debate's recording and [highlights](#) have had

about 1,000 views at the time of writing. Some thirty Italian media outlets covered the event, including leading national newspapers. Our advertising campaign reached over 400,000 people. The second debate is taking place in [Salzburg, Austria, on 23 June 2023](#).

115. The emphasis on making markets work for people complements two other main themes in DG Competition's (and indeed the European Commission's) communication in recent years, i.e., the digital and green transitions. Click on the images below to view the conferences *Shaping Competition Policy in the Era of Digitisation* (2019) and *Greening Competition* (2021). We also ran two student challenges associated to these events to engage with competition students and young scholars (click [here](#) and [here](#)). The *Young Experts* conference (2022) was designed to give a voice to the competition experts of the future.



#### 4. Other initiatives

116. Directly related to the topic discussed during the second part of this roundtable<sup>68</sup>, a dedicated public event (June 2022) was devoted to estimating the costs of non-competition (please click on the image for more details)



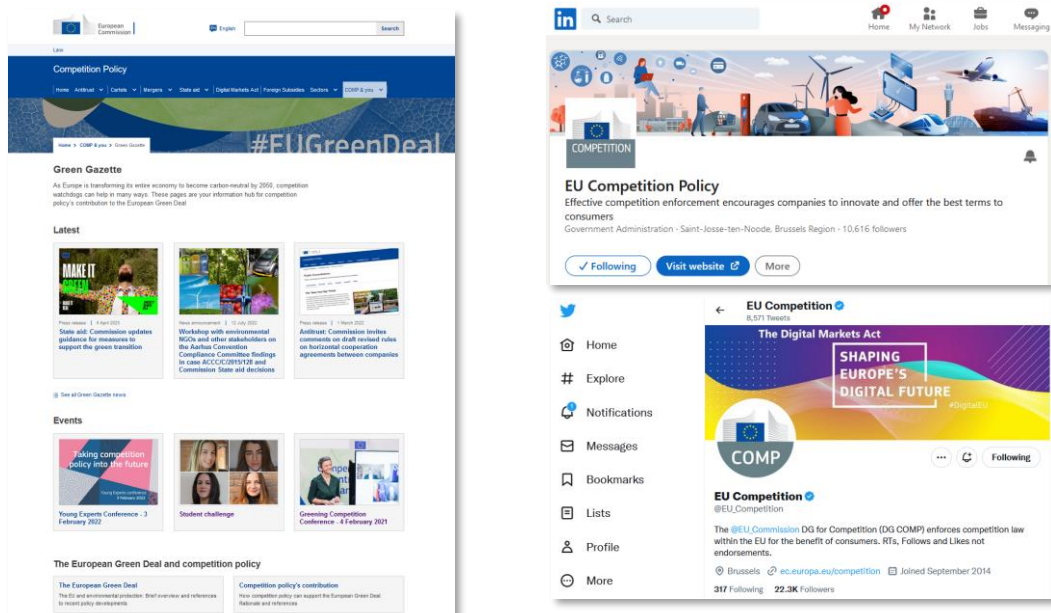
<sup>68</sup> See European Commission note DAF/COMP/WP2/WD(2023)16

117. Other public events include:

- The [Sustainability Guidelines: Enhancing cooperation for a greener agri-food supply chain](#) conference in Brussels;
- Several smaller events related to the Digital Markets Act ([link](#));
- A large conference on 20 June 2023 devoted to 20 Years of the (key competition) Regulation 1/2003 ([link](#)); and
- A couple more listed [here](#) under „older events“

118. All these public events are designed and organised by DG Competition, some in association with other Commission departments. These events allow for a genuine, continuous and orderly conversation with fellow enforcers, stakeholders and experts.

119. A related initiative is the increased use of non-verbal material for our communication, as is common in digital channels. You can also find animations, short videos and recordings of our events in our [YouTube channel](#). Click on the images for more information:



## 5. Looking ahead

120. Those examples show the story that we are telling from the European Commission. Competition authorities are public institutions that stand by the people; defend their interests against rogue economic players; and bring fairness to our economies and societies. All this has a direct and positive impact on people’s lives. In essence, they help make markets work for people, not the other way around.

121. Perhaps thanks in part to the initiatives mentioned in this note – and similar ones from many other competition authorities - the idea has increasingly spread beyond competition circles that fair and level markets, and robust competition enforcement, can help Europe and the rest of the world overcome the economic and social implications of the crises of the past few years: the pandemic, the cost-of-living crisis and Russia’s war of aggression against Ukraine

122. More and more political leaders and opinion makers invoke strong and level-handed competition enforcement to meet growing public demand for more business accountability and solutions against increasing inequality and declining standards of living. Examples abound. This is the political environment in which we are operating. We need to be aware of it and adapt accordingly.