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Working Party No. 2 on Competition and Regulation

Assessing the Impact of Competition Authorities' Activities – Note by the European Union

16 June 2025

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Key points

1. DG Competition considers that the 2014 OECD ‘Guide for helping competition authorities assess the expected impact of their activities’ (‘the Guide’) is a helpful and appropriately flexible tool to help competition authorities across the globe to produce annual customer savings estimates.
2. Since 2012, DG Competition – relying on a method mostly in line with the Guide – has been estimating every year the customer savings expected to result from its interventions during the previous calendar year in the areas of merger control and cartels. Since 2021, it has done the same for other (non-cartel) antitrust cases. It regularly reports these estimates in its Annual Competition and Annual Activity Reports.
3. In addition, DG Competition has started a new initiative with its partners in the European Competition Network (ECN) to produce estimates of aggregate customer savings, so as to obtain a fuller picture of customer savings from Commission and national enforcement within the EU.
4. While the estimated annual customer savings are significant, they only reflect the expected directly avoided price increases and therefore only a part (‘tip of the iceberg’) of the societal benefits of competition enforcement. For that reason, DG Competition is currently investigating the likely indirect deterrent effects of enforcement on the basis of a survey of lawyers and business representatives. In addition, it has started to collect data on the extent to which effects on innovation and quality have played a key role in Commission enforcement. Both the deterrent and the dynamic effects of enforcement are likely more significant than the static price effects. Finally, DG Competition conducts annual simulations of the macroeconomic impact of the competition policy interventions by the EC.
5. DG Competition welcomes the excellent background note prepared by the OECD. The note sets out clearly and comprehensively the issues which deserve to be discussed ten years after the adoption of the 2014 Guide.
6. DG Competition sees a mix of opportunities and risks in updating the OECD guide. In DG Competition’s view, the main opportunity would be to update the assumptions in the guide on the magnitude of the price effects of anticompetitive mergers and cartels. The more recent empirical literature suggests that the assumptions proposed by the 2014 Guide for both cartels and mergers may be too low. An updated guide could also provide guidance on how to assess the benefits of pro-competitive regulation, market studies or advocacy efforts and/or on how to estimate the deterrent effects of enforcement.
7. At the same time, it is important that the OECD Guide remains simple to implement and flexible. In DG Competition’s view, it should not be overly prescriptive on issues which do not have a major impact on results and where several approaches can be justified. Any change should always balance its benefits and costs, bearing in mind that revising past estimates can be complex and not always possible. Therefore, modifications, if any, should

¹ 16.05.2025. Note prepared by Thomas Deisenhofer, Andreas Bovin, Vincent Verouden and Luigi Galassi (DG COMP/PA).

strive to ensure that estimates made and published in the past, based on the 2014 Guide, remain informative and comparable to future estimates.

1. Introduction

8. In 2023, the European Commission (EC) contribution to the OECD Roundtable on “Assessing and Communicating the Benefits of Competition Interventions” outlined DG Competition’s activities to assess the impact of its enforcement, as well as its place within DG Competition’s overall evaluation strategy.² DG Competition is pleased to continue the exchange on this important topic and once again contribute to the OECD Roundtable discussion. DG Competition welcomes the excellent 2025 background note prepared by the OECD which sets out clearly and comprehensively issues which deserve to be discussed ten years after the adoption of the 2014 Guide.

9. The EC’s enforcement of antitrust, cartel, and merger rules is designed to safeguard effective market competition, which helps deliver lower prices, better quality, and greater innovation - ultimately benefiting consumers³ and strengthening the overall EU economy. In turn, effectively quantifying and communicating these benefits is considered crucial for gaining support, building credibility, and demonstrating legitimacy.

10. DG Competition pursues an evidence-based approach to competition policy, which can guide policy making. Impact assessment and ex-post evaluation play important complementary roles in gauging the effectiveness of its policies. This approach ensures that competition policy remains responsive to evolving economic conditions.

11. DG Competition distinguishes between the following effects when evaluating the impact of its enforcement activities:

- **The direct price effects for customers:** Using a relatively simple method consistent with the 2014 OECD Guide⁴, DG Competition seeks to estimate the *expected* direct customer savings in monetary terms generated by the European Commission’s antitrust, cartel and merger enforcement actions on an annual basis.
- **The likely deterrent effects of enforcement activities:** As an important limitation, direct customer savings are only the ‘tip of the iceberg’ when it comes to the savings generated by competition policy interventions. One should further consider the indirect savings generated by deterrent effects, which are often assumed larger than the direct effects.⁵ However, these effects are difficult to assess.
- **Dynamic and non-price effects of enforcement activities:** the dynamic effects of enforcement are also assumed to be very significant and particularly important for economic progress, e.g. by their impact on innovation, quality or choice, but even more difficult to quantify than the deterrent effects

² See Assessing and Communicating the Benefits of Competition Interventions – Note by the European Union (2023).

³ Final consumers, but also customers of intermediate goods and services.

⁴ OECD (2014), Guide for helping competition authorities assess the expected impact of their activities, <https://www.oecd.org/daf/competition/Guide-competition-impact-assessmentEN.pdf>

⁵ 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.

- **The broader macroeconomic impact of enforcement:** Finally, the positive impact of competition policy enforcement at the microeconomic level is an important driver of welfare and growth at the macroeconomic level: the reduction in markup and the associated price adjustment resulting from competition policy interventions can contribute to improved economy-wide measures of performance such as GDP, employment, prices and aggregate productivity. Quantifying the macroeconomic benefits of competition policy enforcement provides a useful basis to effectively communicate the benefits of competition enforcement to governments, stakeholders and the public at large.

12. Consequently, DG Competition is engaged in several ongoing projects, which to varying degrees try to capture the above-mentioned effects of competition enforcement. The rest of this note is structured as follows:

13. With regards to the direct customer savings, this note provides a concise presentation of the annual exercise in which DG Competition estimates expected customer savings from enforcement during the previous year (Section 2), of some of the methodological issues encountered over the past few years (Section 3), and of estimates of direct customer savings for the most recent period 2012-2024 (Section 4).

14. In addition, Section 5 presents the results of a first aggregation exercise, which aims at quantifying customer savings generated by competition interventions within the larger European Competition Authorities Network (ECN). While still preliminary, this exercise serves as the initial step in a larger project aimed at highlighting the collective benefits of competition enforcement and a potential further alignment of the methodologies used by various national competition authorities and the EC to quantify direct customer savings.

15. Section 6 discusses recent initiatives undertaken by the EC to obtain estimates of the indirect or deterrence effects of competition enforcement actions within an EU-wide framework. Deterrent effects are generated by the discouragement of anti-competitive conduct which would have taken place in the absence of competition enforcement.⁶

16. As competition authorities have increasingly incorporated innovation as part of their assessment in enforcement cases⁷, DG Competition considers that it is relevant to report the number and importance of EU policy interventions considering how firm behaviour affects innovation (see Section 7).

17. In collaboration with the Joint Research Centre (JRC) and the Directorate General for Economic and Financial Affairs (DG ECFIN), DG Competition conducts annual simulations of the macroeconomic impact of the competition policy interventions by the EC. The results of the most recent simulations analysing the impact of competition policy interventions made over the period 2012-2022⁸ are presented in Section 8.

⁶ See, for instance, Dierx, A., Ilzkovitz, F., Pataracchia, B., & Pericoli, F. (2023). Modelling the diffusion of the deterrent effects of competition policy. *Journal of Competition Law & Economics*.

⁷ OECD (2023), “The Role of Innovation in Competition Enforcement”, *OECD Roundtables on Competition Policy Papers*, No. 301, OECD Publishing, Paris, <https://doi.org/10.1787/6599e020-en>

⁸ European Commission, Directorate-General for Competition, Joint Research Centre and Directorate-General for Economic and Financial Affairs (2024), “Modelling the macroeconomic impact of competition policy-2023 update and further development”, Publication Office of the European Union.

2. DG Competition's annual assessment of the direct customer savings generated by its enforcement

18. In an ongoing exercise, DG Competition calculates and reports the direct customer savings generated by its interventions since 2012. These savings are generated by the EC's merger⁹, cartel¹⁰, and non-cartel antitrust enforcement¹¹ (henceforth simply referred to as antitrust). These estimates allow DG Competition to present every year a simple, concise, and conservative estimate of the added value of competition enforcement to the general public, and institutional stakeholders such as the European Parliament or the European Court of Auditors. These estimates are published in the Annual Report on Competition Policy and the Annual Activity Reports of DG Competition.¹²

19. This section provides a brief discussion of the methodology, summarizes the key issues as set forth in prior publications on this topic and provides the most recent figures for DG Competition's customer savings estimates.

2.1. Methodology

20. The methodology underlying customer savings estimation employed by DG Competition largely reflects the OECD's 2014 guide.¹³ DG Competition's methodology closely adheres to 4 out of 7 principles outlined by the OECD, as it (i) uses case-specific data when possible, (ii) assumes 'no intervention' would harm consumers, (iii) publishes estimates regularly, and (iv) breaks down results by decision type.

21. For two other principles, there are minor differences. While the OECD guidelines recommend (v) reporting the results both as an annual figure and as an annual moving average over three years, DG Competition provides annual figures, as well as an average over the entire sample length. A revision of the Guide could clarify that this is also a valid way to present the customer savings estimates. Similarly, the 2014 Guide suggests that (vi) dynamic consumer benefits, such as an increase in innovation, should be – when possible – included in addition to static consumer benefits. So far, DG Competition's savings estimates have mainly restricted attention to static price benefits, while acknowledging dynamic benefits like innovation through surveys but not including them in calculations. Considering the importance of dynamic effects, DG Competition has undertaken further

⁹ 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.

¹⁰ Cartel prohibition decisions under Article 7 of Reg. 1/2003. DG Competition assumes that such decisions generated customer savings only if the cartel terminated less than three years before DG Competition started the investigation. See also Section 3 below for a further discussion.

¹¹ 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. The same rule as for cartels terminated before the Commission started its investigation (cf. previous footnote) is applied to non-cartel antitrust decisions.

¹² European Commission, Directorate-General for Competition (2024), Annual Report on Competition Policy 2024. [competition-https://policy.ec.europa.eu/publications/annual-reports_en](https://policy.ec.europa.eu/publications/annual-reports_en)

¹³ Cf. OECD (2014), quoted above. For an overview table of the OECD and DG Competition principles, see Annex A.

efforts to collect data on the role of innovation and quality in its interventions, as will be further discussed in Section 7 on innovation and competition enforcement.

22. While DG Competition’s approach therefore largely aligns with the 2014 Guide, there remains an important difference regarding the OECD principle put forward that (vii) ‘**point**’ estimates should be provided. To reflect the inherently approximative and uncertain nature of customer benefits estimation, which can be expected to provide robust overall estimates given a long enough timespan, but not necessarily at the individual case level, and to account for the wide ranges of assumptions made in the economic literature, DG Competition reports the customer savings in ranges. In DG Competition’s view communicating customer savings estimates in the form of ranges provides an important signal to stakeholders that customer savings estimates are inherently approximative and uncertain. DG Competition therefore recommends that any future revision of the Guide should either recommend to use ranges or at least foresee that as a valid option for competition authorities.

23. Direct customer savings generated by any intervention are presumed equal to (1) the likely price increase (or overcharge) avoided as a result of that intervention, multiplied by (2) the size of the affected market(s) or turnover and (3) the expected duration of the price effect. Annual customer savings are equal to the sum of the direct customer savings from all interventions in a given year.

customer savings

$$= \text{affected turnover} \times \text{avoided price increase} \\ \times \text{expected duration of price increase}$$

24. Information on the three above components of customer savings are – to the extent possible – based on case-specific information and inspired by the economic literature and the OECD 2014 guidance.¹⁴ The main assumptions used by DG Competition in these calculations are given in Table 1 and contrasted with the OECD assumptions.¹⁵

¹⁴ OECD (2014), Guide for helping competition authorities assess the expected impact of their activities, <https://www.oecd.org/daf/competition/Guide-competition-impact-assessmentEN.pdf>; see also A. Dierx and F. Ilzkovitz (2020), Ex-Post Economic Evaluation of Competition Policy: the EU Experience (Kluwer), Ch. 11.

¹⁵ OECD Guide (2014); Dierx and Ilzkovitz (2020).

Table 1. Assumptions used by DG Competition and the OECD to calculate the customer savings from cartel, merger and antitrust intervention

	Merger		Cartel		Antitrust	
	DG Comp	OECD	DG Comp	OECD	DG Comp	OECD
Affected turnover	Annual turnover of all firms in the affected market(s)	Ex-ante turnover of all firms in the affected market(s)	Annual turnover of the companies under investigation in the affected market(s)	Ex-ante turnover of the companies under investigation in the affected market(s)	Annual turnover of the companies under investigation in the affected market(s)	Ex-ante turnover of the companies under investigation in the affected market(s)
Avoided price increase	3-5%	3%	10-15%	10%	5-10% unless case-specific information is available	5%
Expected duration of the price effect	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

25. As mentioned previously, the two methodologies are largely similar but DG Competition considers *ranges* for the expected price effects of the competition policy interventions to reflect the ranges of such effects reported in the economic literature and the existing uncertainty over the average magnitude of such effects.

- Specifically, for merger interventions, the 2014 OECD guide provides a recommendation for the avoided price effect of 3% (single figure recommendation within a range of plausible values). In light of recent empirical literature this estimate would appear to be too low as a measure of the expected price increase from a merger requiring DG Competition's intervention. For instance, Ormosi et al. (2015, 2020)¹⁶ review a sample of 16 retrospectives on merger decisions in the EU and show an average price effect of approx. 5% even for unconditionally approved mergers. Stöhr (2024), in her recent meta study on EU and US merger retrospectives, likewise refers to a 4,7% price increase found on average (and higher estimates in concentrated markets/problematic cases).¹⁷ In his meta-study of U.S. ex post merger evaluations, Kwoka (2015)¹⁸ finds that unconditionally approved mergers are followed by a price increase of around 7%.¹⁹ Further studies are listed and discussed in the background note provided by the OECD secretariat.

¹⁶ Ormosi, P., F. Mariuzzo and R. Havell (2015), A review of merger decisions in the EU: What can we learn from ex post evaluations?, Publications Office of the European Union, Luxembourg. See also Havell, R., Mariuzzo, F and P. Ormosi (2020), A Review of Merger Decisions in the EU, in: Ex Post Economic Evaluation of Competition Policy (Ilzkovitz, F. and Dierx, A., eds.)

¹⁷ Stöhr (2024), Price effects of horizontal mergers. A retrospective on retrospectives, Journal of Competition Law & Economics, 2024, 00, 1–25.

¹⁸ Kwoka J.E. (2015), 'Mergers, merger control, and remedies: A retrospective analysis of U.S. policy', MIT Press.

¹⁹ It is worth mentioning that price effects may also be observed for competitors. Stiebale and Szücs (2022) analyse the effects of M&A on the markups of non-merging rival firms, based on a sample of 194 merger cases that were notified to the EC between 1999 and 2007. The authors estimate markups as a measure of market power using firm level data (Orbis dataset). The results indicate that rivals typically increase their markups after mergers (compared to a control group of firms not in a market featuring a merger) by 2.3% to 2.5%. The effects are particularly pronounced when pre-merger concentration is high, when competitors are few, and when relevant markets are national. The increases are less pronounced (and possibly insignificant) for cases in which

- For cartel prohibitions the 2014 OECD guide puts forward an avoided price increase of 10% which seems to be significantly too low in comparison to recent evidence in empirical literature on price overcharges for cartels. The more recent empirical literature also discussed in the OECD background note suggests a median price overcharge for cartels varying between 15% and 25%.²⁰

26. DG Competition considers that the assumptions regarding the magnitude of the avoided price increases for cartels and mergers are the main parts of the 2014 Guide which deserve to be revised. Assumptions need to be conservative, but not to the point where the estimates provided do not reflect any longer the current consensus between economic researchers. As already stated above an increase of the assumptions could or even should be combined with providing upper and lower bounds for the assumptions on the avoided price increases in order to reflect the band of results obtained by economic researchers.

27. For a more elaborate discussion of the assumptions underlying DG Competition's methodology, the reader is referred to the EC's 2023 contribution to the OECD roundtable on "Assessing and Communicating the Benefits of Competition Interventions" as well as Annex B.

3. Methodological issues encountered by DG Competition

28. This section discusses some issues encountered by DG Competition which remain – at least partly - unaddressed in the 2014 OECD guide.²¹

3.1. Informal interventions

29. A methodological issue not explicitly covered by the OECD guidance is whether informal interventions - cases closed without a formal decision after companies voluntarily end anti-competitive behaviour or implement remedies - should be included in customer savings calculations. After discussing the issue with the OECD and academics, DG Competition has decided to include such cases, since these interventions can be a legitimate and efficient use of resources and can result in the same economic benefits for consumers as formal actions.²²

remedies were applied. Stiebale, J. and F. Szücs (2022), *Mergers and Market Power: Evidence from Rivals' Responses in European Markets*.

²⁰ For instance, Connor and Lande (2023) report that in their database of cartels, median average overcharges since 1999 appear to be 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). Boyer and Kotchoni (2015), based on a meta-analysis of cartel overcharge estimates, report a mean overcharge of 15.47%. Marcel Boyer, M. and Kotchoni, R. (2015), *How Much Do Cartel Overcharge*, *Review of Industrial Organization*, Vol. 47, No. 2 (September 2015), pp. 119-153. 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).

²¹ Most of these issues – with the exception of inflation/discounting, private damage claims and ex-ante regulation - were discussed in the prior roundtable contribution. While this section provides a brief overview, the reader is referred to the EC's 2023 contribution to the OECD roundtable for a more elaborate discussion.

²² Recent examples of informal interventions are those in relation to the Visa and MasterCard inter-regional MIFs cases in 2024. On 29 April 2019, the European Commission adopted a decision accepting the commitments from MasterCard and Visa on MIFs on transactions concluded in the EEA for cards issued outside of the EEA (see cases AT.39398 and AT.40049). The commitments were to expire on November 1st, 2024, but

30. However, to avoid overestimating its impact, DG Competition only includes informal interventions when there is clear public documentation (such as a press release or official report) substantiating both the existence of the intervention and a causal link between the investigation and the change in business conduct. This ensures that the authority only takes credit when it is confident its actions directly influenced a pro-competitive outcome, aligning with the conservative stance taken in customer savings calculations.

3.2. Interventions under appeal or later annulled by the Courts

31. DG Competition conducts customer savings calculations annually, including all decisions taken within the previous year, even if some are under appeal or might be appealed in the future. This approach aligns with one of the two options foreseen in point 1 (ii) of the 2014 guide. Since the outcome of appeals is uncertain at the time of calculation, excluding such cases would undermine the completeness and consistency of the annual reporting.

32. The OECD guide does not explicitly address how to handle decisions that are later annulled by courts. While retroactively adjusting past customer savings figures may seem at first sight logical, it has also a number of downsides as it introduces complexity, instability, and issues of comparability across years. Furthermore, if decisions annulled by the General Court are retroactively removed, this would also necessitate the retroactive re-inclusion of decisions confirmed on appeal by the Court of Justice or readopted by DG Competition. These re-inclusions would introduce further instability and again affect the comparability of years.

33. DG Competition has therefore opted so far not to revise past figures in case of annulments, prioritizing simplicity and consistency. At the same time, to avoid double counting, re-adopted decisions are excluded from savings calculations. As this issue has proven to be more complex than it seems and different approaches have different pros and cons, DG Competition recommends that any future guidance discusses the problem and provides different options without being more prescriptive than the 2014 guide.

3.3. Infringements terminated before DG Competition started its investigation

34. DG Competition faces a methodological challenge in determining whether to count customer savings from cartel and antitrust cases where the illegal conduct ended before the official investigation began. In such cases - like when a cartel ends its activities before a leniency application or before DG Competition's investigation starts - it may be argued that the intervention had no direct effect on stopping the infringement. However, it is also possible that the infringement ended due to the fear of an impending investigation (as might arguably be the case e.g. in many leniency cases), suggesting a direct link between the Commission's anticipated actions and the termination of illegal conduct.

35. To address this, DG Competition has adopted a pragmatic rule: it includes past infringements in the customer savings calculation if the conduct ended less than three years before the case was officially registered. This simplifies the process by avoiding the need to determine the precise reason for the cartel's termination in each case, while still capturing cases likely influenced by the prospect of enforcement action.

on 1 July 2024 the companies committed to continue adhering to the MIFs for five more years starting from November 1st 2024.

3.4. Financial markets

36. In the case of companies operating in financial markets (e.g. banks, insurance firms, credit card companies), their exceptionally large turnovers and transaction volumes can lead to inflated customer savings estimates if standard turnover figures are used. This is due to the unique nature of financial services, where high transaction values do not necessarily reflect proportional customer harm or savings.

37. To address this in cartel cases, DG Competition uses turnover proxies developed by case teams specifically for calculating fines, which better reflect the relevant economic activity affected by the infringement. A similar approach is also suggested for merger cases, where proxies can be examined to ensure the customer savings calculations are realistic and not skewed by the high nominal turnover typical in the financial sector.

3.5. Inflation correction

38. In competition cases, it is often the case that the available turnover data are only available with a (limited) time lag. To estimate savings in real terms for the year in which the Decision is adopted, an inflation adjustment could be applied. If current turnover data is unavailable and past turnover is used instead, correcting for inflation would help ensuring that the figures reflect today's value.²³

39. In a similar manner, an inflation correction could be applied on future savings to avoid comparing real turnover at time t to nominal future savings. Due to the ex-ante nature of the exercise, future inflation figures are unavailable at the time of calculation. If available, inflation forecasts might be used.²⁴

40. Doing these adjustments for inflation would however add complexity without necessarily adding more precision. DG Competition prefers therefore not to adjust for inflation, thereby maintaining a conservative position as this correction - absent deflationary periods - would increase both the relevant turnover employed in calculating the savings, as well as the expected future savings. For similar, mostly practical reasons DG Competition does not adjust past savings estimates for inflation either in its historical overview 2012-2024.

3.6. Discounting

41. DG Competition is aware that a number of competition authorities employ customer savings estimates as a point of comparison, for instance by comparing savings generated in a given year with the budget allocated to competition enforcement that same year.²⁵ As customer savings from interventions are generally realized over a time horizon

²³ If, for a given case, turnover is available for year $t-k$, but the intervention occurs in year t , an adjustment can be made to account for inflation over that period. Let π_t denote the cumulative inflation rate from year $t-k$ to year t . The inflation adjusted turnover at time t is calculated by multiplying the relevant turnover at time $t-k$ with $1 + \pi_t$.

²⁴ For instance, the Dutch competition authority ACM uses inflation forecasts of the CPB Netherlands Bureau for Economic Policy Analysis.

²⁵ See Section 5 of this Contribution, specifically Table 3.

which exceeds the year of the intervention, one might discount the estimated stream of benefits to obtain a net present value of the savings.²⁶

42. DG Competition refrains from discounting its customer savings. Using a discount rate adds additional complexity to the calculations while not necessarily providing significant gains in accuracy. A first problem is the which discount rate to use. More importantly, if the varying value of money over time is taken into account it would also be logical and necessary to adjust the affected turnover to future inflation which would lead to rising nominal customers savings for every year after the intervention. Inflation adjustment for the affected turnover and discounting would pull in different direction and cancel each other partially out.

3.7. Private Damage Claims

43. In calculating direct customer savings, DG Competition only considers the avoided harm expected to result from its interventions (going forward, in the years following the intervention). However, this approach may overlook an important aspect: in cartel and antitrust cases, such interventions often pave the way for follow-on private damage claims to obtain compensation for past damage. The benefits derived from these claims - which can in many cases be traced back to the Commission's enforcement actions - could arguably be regarded, at least to some extent, as part of the overall savings generated by the intervention. At the same time, these savings are of a different nature and the extent to which full compensation is effectively obtained is not certain and may differ from case to case.

3.8. Interaction with Ex-ante Regulation

44. Over time, there have been instances of sectors where traditional competition law enforcement, which is necessarily *ex post*, has been complemented with new legal tools allowing for *ex ante* regulation of company behaviour. A notable and recent example is the Digital Markets Act (DMA) enacted in 2022, which requires digital gatekeepers to comply with a number of obligations relating to e.g. fair access, data usage restrictions, interoperability, and platform neutrality.²⁷ The DMA complements, but does not change EU competition rules, which continue to apply fully. Even so, it is possible that, over time, the frequency or nature of competition law interventions in the digital area may be affected by it, given that there are clear overlaps between the two as to the types of (anticompetitive) behaviour they cover. Consequently, the enactment of the DMA may, potentially at least, have an impact on estimated customer savings from competition enforcement in this area in future years.

45. DG Competition therefore welcomes the proposal in the OECD background note to reflect jointly on how to measure the customer benefits of regulatory interventions such as the DMA, advocacy or market studies.

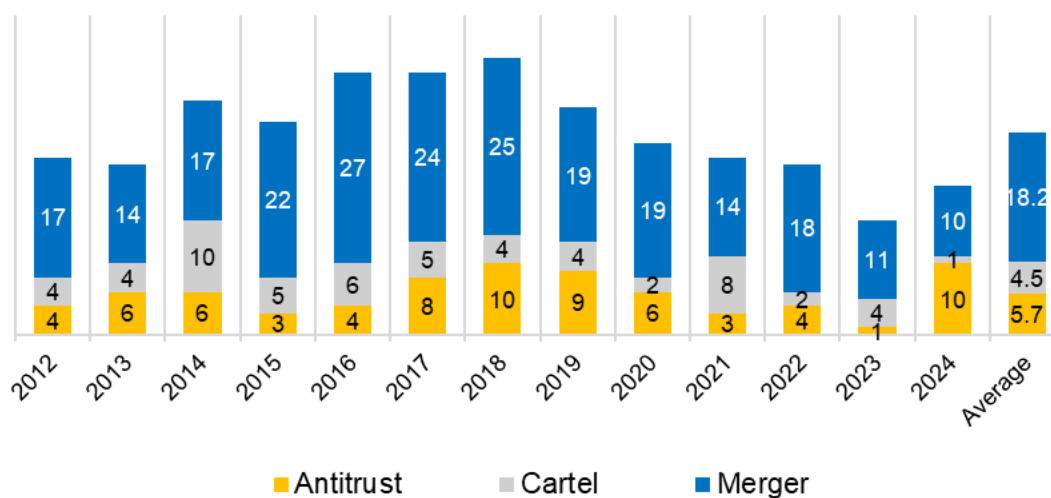
²⁶ Discounting reduces the present value of customer savings when the expected duration of the price increase exceeds one year. The longer the price effect is assumed to persist, the greater the reduction.

²⁷ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act), OJ L 265, 12.10.2022, p. 1–66. For more information, see https://digital-markets-act.ec.europa.eu/index_en

4. Results of the customer benefits estimations for the period 2012-2024

46. This section presents updated figures on customer savings estimates. Over the past 13 years, the **average number of interventions was approximately 28 per year**, with the vast majority being in merger control. For an overview of the total number of interventions each year – by instrument – see Figure 1 below.

Figure 1. Number of interventions (2012-2024)



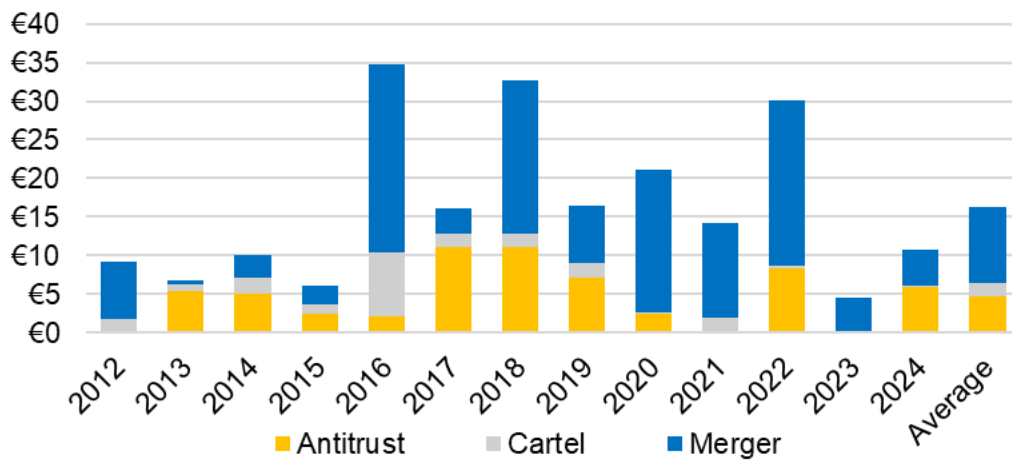
47. In 2024, 21 interventions took place, which is an increase compared to 2023 but still the second lowest figure since the start of the exercise. With a total of 10 antitrust interventions, it does mark a significant increase compared to the average, whereas the number of cartel (1) and merger (10) cases were historically low.

48. In practice, DG Competition reports the direct customer savings as an estimated range. On average, annual customer savings generated by its interventions over the period 2012-2024 were in the range of EUR 12-20 billion. Relatively speaking, this corresponds to annual average savings of around EUR 60-100 per EU household.²⁸

49. Figure 2 depicts the total midpoint estimates. For 2024, **the midpoint estimate amounted to approximately EUR 11 billion**, which is below the long-term average. Antitrust savings in 2024 were above average (EUR 6 billion), whereas 2024 merger savings were of a moderate value (EUR 4.7 billion) and comparable to 2023. Cartel savings in 2024 were low, with a single case accounting for approximately EUR 100 million in savings.

²⁸ Estimate based on 200 million households in the EU. This figure is derived using 2023 household statistics based on the European Union Labor Force Survey (EU-LFS). See: [Household composition statistics - Statistics Explained - Eurostat](#)

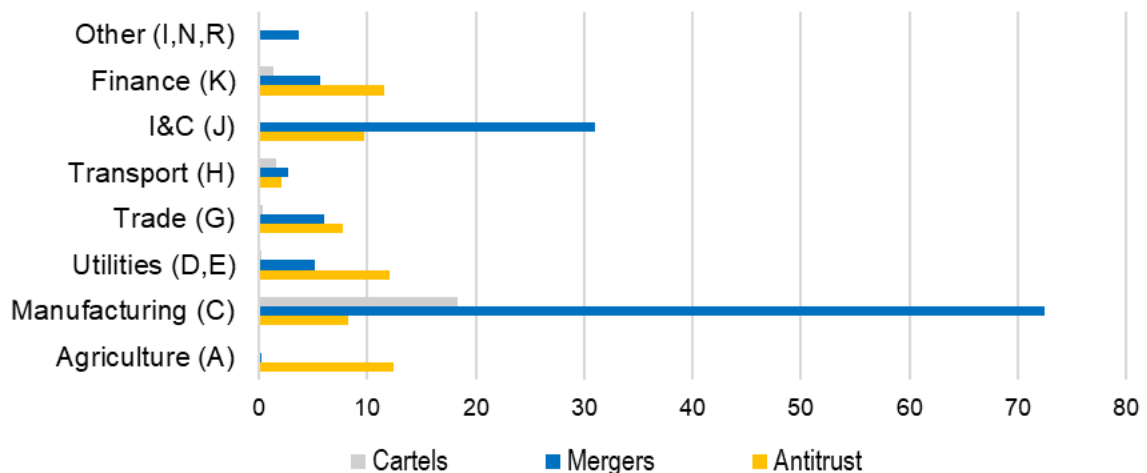
Figure 2. Customer savings by instrument (2012-2024) in billion EUR (midpoints)



50. The distribution of customer savings **varies significantly across sectors and types of enforcement**, as shown on Figure 3. Non-cartel antitrust interventions generated savings across a broad range of sectors, particularly in the agriculture, finance, retail, transport and utility sectors.

51. In contrast, merger interventions produced customer savings that were more concentrated in the Manufacturing and Information & Communication sectors, while cartel enforcement savings were largely the result of interventions in the manufacturing sector. Overall, the manufacturing sector is, due to its structure of high fixed costs and market concentration, likely to be more susceptible to competition issues and hence a significant target for enforcement action.

Figure 3. Customer savings by sector (2012-2024)



5. Cooperation within the ECN: A first aggregation exercise (2020-2022)

52. Competition enforcement within the EU is a joint effort by both the EC and the national competition authorities (NCAs) of the different EU Member States, which together make up the European Competition Network (ECN).

53. The EC and a subset of NCAs have so far reported separately on the customer savings generated by their own activities. As the aim is to jointly communicate the **total benefits of all competition interventions by competition authorities of the EU** to stakeholders and the public, this approach to present separate figures tends to underestimate (or underrepresent) the benefits of the ECN's overall enforcement²⁹.

54. In light of this issue, DG Competition has organised three ECN workshops (November 2021, February 2023 and May 2024) and engaged with interested NCAs to explore potential avenues for enhanced cooperation. The main objectives were the following:

- To provide an initial overview and comparison of the methodologies and assumptions employed by cooperating NCAs in calculating customer savings;
- To provide an initial estimate of the joint customer savings from all interventions, both by the cooperating NCAs and DG Competition. Separate reporting might not be the most effective way to communicate the benefits resulting from competition enforcement, as it does not capture (1) the added value of enforcing competition rules in a network, and (2) the cumulative nature of customer savings from an EU citizen/customer perspective;
- To start a discussion on the practical steps towards a further alignment and aggregation of customer savings within the ECN.

5.1. Methodological Comparison

55. Up until the May 2024 workshop, 17 NCAs expressed their willingness to participate and 13 NCAs have submitted data for the first aggregation exercise.³⁰ The 17 Member States make up 86% of the population of the European Economic Area (EEA) (70% in the case of the 13 NCAs having submitted data), and 84% of the EEA GDP (75% for the 13 NCAs).

56. The NCA methodologies for calculating customer saving are not fully aligned, although there is a high degree of overlap, with seven NCAs relying at least in part on DG Competition's assumptions, whereas 10 NCAs rely at least in part on the OECD's assumptions.³¹ In particular, there are discrepancies on the magnitude of the avoided price increase and expected duration. Table 2 presents an overview of the main methodological assumptions employed by the 17 cooperating NCAs.

²⁹ It should be noted that the calculated benefits presented here still only reflect the "tip of the iceberg" in terms of positive effects of competition enforcement, as they do not take into account positive non-price effects as well as indirect deterrence effects.

³⁰ For a list of the cooperating NCAs, see Table 2, which further differentiates between the NCAs which provided data for the current exercise and those who did not. Since the May 2024 workshop, two further NCAs have expressed the willingness to join the exercise, namely those of Finland and Ireland.

³¹ Cf. OECD (2014, quoted above).

Table 2. Overview of methodologies DG COMP, OECD and NCAs

	Antitrust		Cartels		Mergers	
	Overcharge/ avoided price increase	Duration	Overcharge/ avoided price increase	Duration	Overcharge/ avoided price increase	Duration
DG COMP	5-10% <1>	1/3/6 years	10-15%	1/3/6 years	3-5%	2/3/5 years
OECD	5%	3 years	10%	3 years	3%	2 years
Literature			10-25%		≥5%	2-3/5 years
NCAs						
Belgium*	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP
Cyprus*³²	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP
Denmark	OECD	OECD	OECD	OECD	OECD	OECD
Estonia*	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP
France*	1%<2>/1%<3>/ 2.5%<4>/ 5%<5>	OECD	1%<2>/2%<3>/10%	OECD	3%	OECD
Germany*	DG COMP<6>	DG COMP if possible/ OECD otherwise	DG COMP<6>	DG COMP if possible/ OECD otherwise	DG COMP	DG COMP if possible/ OECD otherwise
Greece	Max 10%	1/2/3 years<7>	OECD	1/2/3 years<7>	Do not calculate	
Hungary*	10%	2 years	OECD	2 years	5%	OECD
Iceland*	DG COMP	OECD	10-15%/5-10%<8>	OECD	DG COMP	OECD
Italy*	OECD	OECD	OECD	OECD	OECD	OECD
Latvia*	OECD	2 years	OECD	1 year	OECD	OECD
Lithuania*	OECD	OECD	OECD	OECD	OECD	OECD
Netherlands*	OECD	OECD	OECD	OECD	OECD	3 years
Poland	OECD	OECD	OECD	OECD	OECD	OECD
Romania	10-15%	DG COMP	DG COMP	DG COMP	Do not calculate	
Spain*	OECD	OECD	OECD	OECD	OECD	OECD
Sweden*	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP	DG COMP

Notes: * Provided data for 2020-2022.

<1> Unless case-specific calculation is available

<2> When the case has been closed by a commitment procedure

<3> If the decision indicates that the harm has been limited

<4> Vertical anticompetitive agreements <5> Abuse of dominance

<6> Refined by case specific information, if possible

<7> Depending on case specific information

<8> Cases regarding vertical agreements or involving associations of companies, where the unlawful behaviour involves public messages from the association to its members

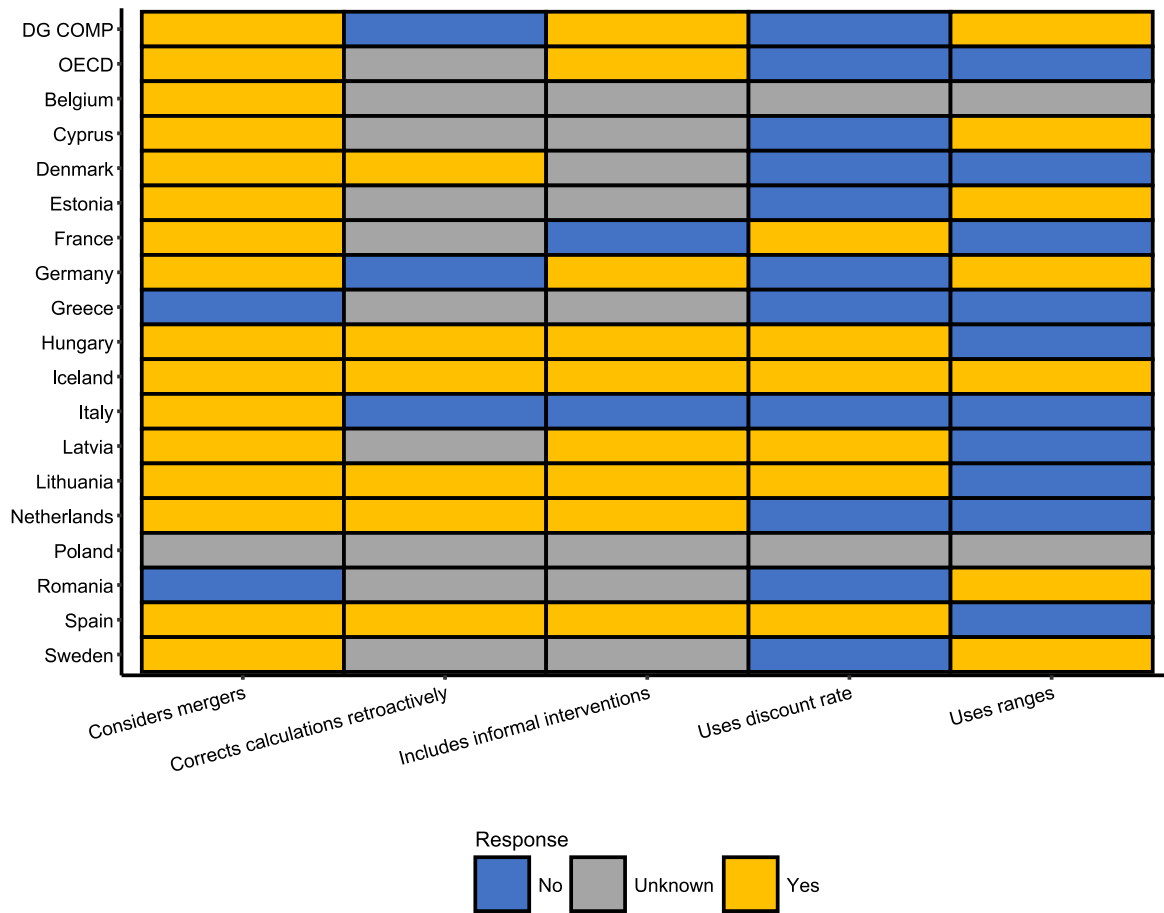
57. In addition, there are mixed practices on other methodological choices such as upper and lower bounds, discounting, retroactive correction, and the inclusion of informal interventions. While the majority of NCAs assess customer savings from merger control,

³² Note by the Republic of Türkiye: The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the “Cyprus issue”.

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Türkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Romania and Greece do not. Overall, however, the customer savings estimates of the NCAs align closely to the OECD’s recommendations and/or DG Competition’s approach. DG Competition is of the view that it is not necessary or even desirable to achieve total alignment or full harmonisation of methods between authorities as long as there is some agreement on the basic method and the main assumptions. DG Competition recommends that the any future revision of the Guide expressly leaves some flexibility to competition authorities. For an overview of additional methodological choices, see Table 3.

Table 3: Other Methodological Choices



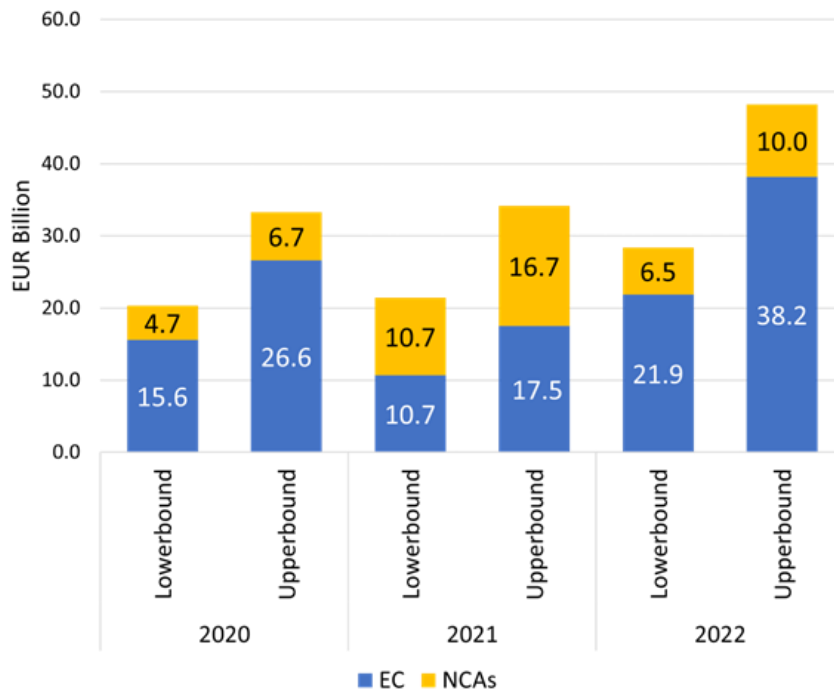
5.2. Aggregate Savings

58. Figure 4 below presents the joint customer savings, distinguishing between those generated by the EC and the cooperating NCAs. For a 3-year period (2020-2022), the estimated total direct customer savings from all interventions by the EC were on average in the range of EUR 16 - 27 billion per year. For the same 3-year period, this figure was equal to EUR 7 - 11 billion for the 13 co-operating NCAs having provided data³³

³³ The variation for the upper- and lower-bound of the NCAs is less pronounced, because not all NCAs use upper- and lower-bounds for their estimations of customer savings.

59. Consequently, **the aggregate savings (EC + NCAs) amount to an average of around EUR 23 - 38 billion per year**, which would amount to ca. EUR 120 - 180 per household.³⁴ Exclusion of the customer savings generated by the cooperating NCAs therefore yields a figure which is approximately 30% below the joint savings. This, in turn, demonstrates how jointly reporting these savings is important when communicating the benefits of competition enforcement by the ECN.³⁵

Figure 4. Aggregated customer savings in EUR billion (2020-2022)

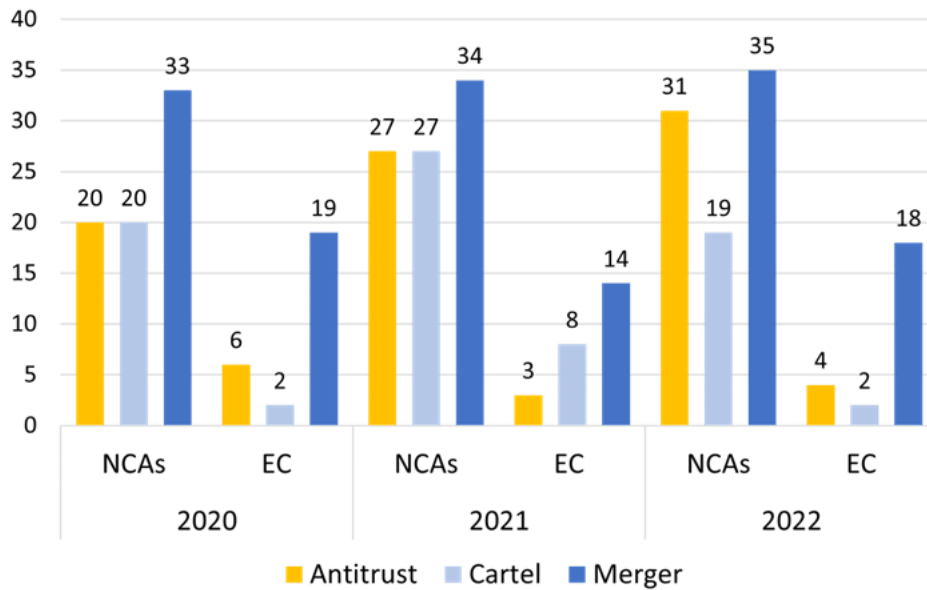


60. Figure 5 below demonstrates that, over the period concerned, the 13 NCAs have intervened more often than the EC, in particular in antitrust and cartels. The majority of EC interventions are merger interventions (67%), followed by antitrust (17%) and cartel decisions (16%). The NCAs also have a majority of merger interventions (41%), followed by antitrust (32%) and cartel decisions (27%).

³⁴ This figure was obtained using 2023 household data from [Eurostat](#).

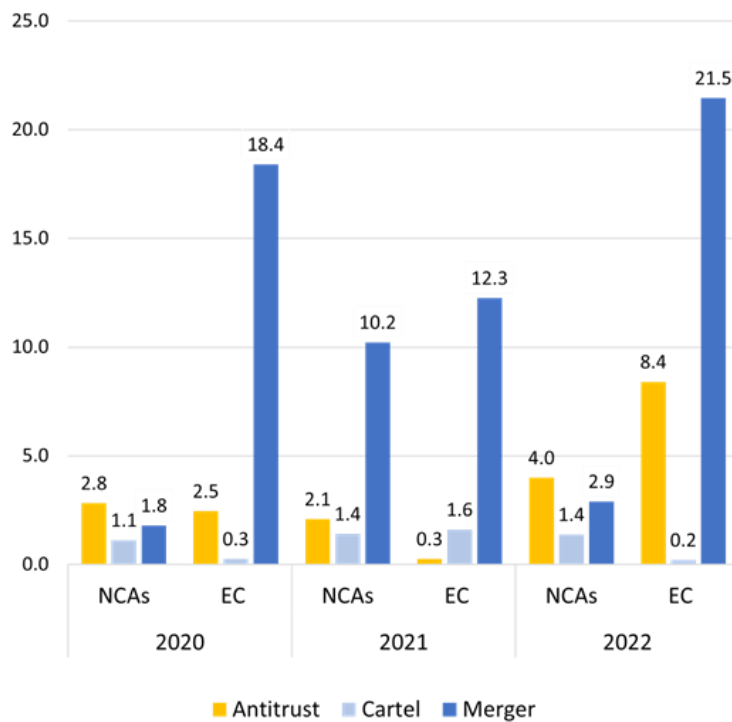
³⁵ It should further be noted that this exercise took place during 2020-2022, which are the years in which the COVID crisis and its effects took place. Therefore, ^{these} years are not the most representative and the exercise should be repeated in the following years to get a more representative picture.

Figure 5. Number of Interventions per year per instrument (2020-2022)



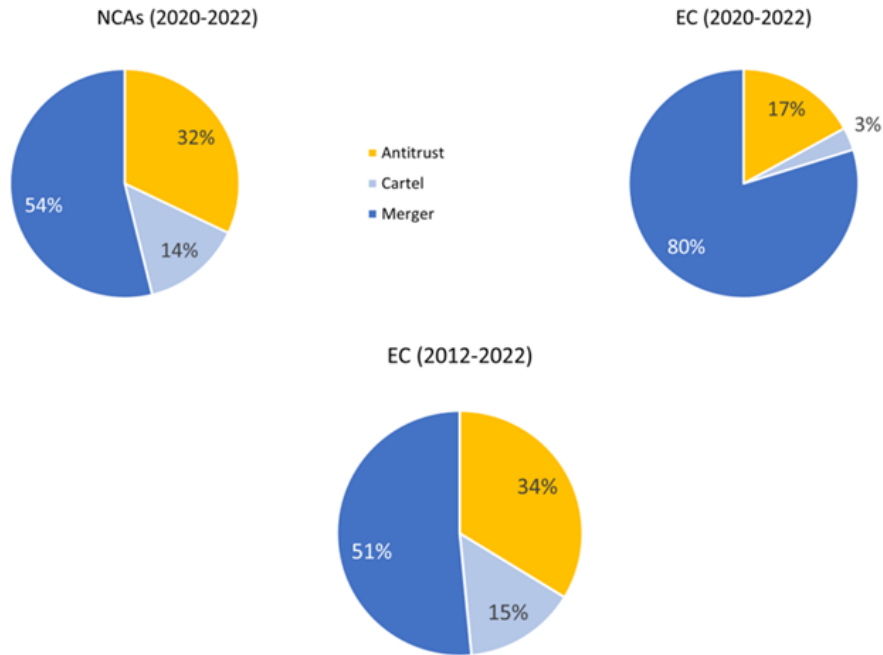
61. As, by legal construction, the EC is dealing with larger cases in terms of turnover (Figure 6) the total direct savings generated by the EC were – especially in the case of mergers – higher for the EC in comparison (see Figure 6 below). In the case of antitrust and cartels they were more similar to those generated by the 13 NCAs. For mergers they were higher for the EC in comparison. Thus, the average customer savings per case are, as would be expected, larger for the EC, particularly in the case of mergers.

Figure 6. Customer savings per year per instrument, in EUR billion (2020-2022)



62. Further clarification is provided by Figure 7 below, which presents the share of each instrument in total customer savings. This figure demonstrates that in 2020-2022, savings resulting from merger control make up a larger fraction of the pie for the EC compared to the NCAs.

Figure 7. The share of each instrument



63. In addition, this figure presents prior data on EC savings and interventions over the 2012-2020 period, which suggests that the 2020-2022 period covered exhibits some important differences compared to the full sample period (at least for the EC). In particular, the share of cartel and antitrust interventions, as well as the corresponding savings generated by these interventions, seems to be significantly lower post-2020 for the EC. While DG Competition can only speculate on the reasons for this difference, it does suggest a need to repeat this exercise in the following years to get a more representative picture for the combined customer savings.³⁶

64. Going forward, DG Competition is keen to continue cooperation with the NCAs on the aggregation of customer savings. The main objectives for the future are to:

- Further increase, if possible, the number of participating NCAs.
- Continue exchanges on methodologies
- Obtain aggregate customer savings estimates over a longer time span, with a current plan to include 2023 and 2024.

³⁶ For instance, this period was heavily impacted by the Covid-19 pandemic, which resulted in the covid-19 recession and a global economic downturn.

6. The deterrent effects of competition enforcement

65. 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.

66. 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.

67. 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.³⁷

68. 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.

69. 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.³⁸ 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.

70. 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, the Commission commissioned a study on the deterrence effects of competition enforcement in 2023. The selected contractor is currently conducting a survey among businesses and competition lawyers to better understand how companies take into account EU competition

³⁷ A. Dierx and F. Ilzkovitz (2020). *Ex-Post Economic Evaluation of Competition Policy: the EU Experience* (Kluwer Chapter 12).

³⁸ 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.

rules, and their enforcement, when making business decisions. The results will be fed into a final report which will be ready towards the summer of 2025.

71. 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 also allow to review the empirical foundation of the macroeconomic model simulations of the impact of competition policy such as the one conducted in collaboration with the JRC and DG ECFIN, presented in Section 8 below.

7. Innovation and competition enforcement

72. In communicating the benefits generated by its enforcement actions, DG Competition has – so far – largely restricted attention to the direct price effects. Yet healthy competition is assumed to not only reduce prices, but also boost innovation, improve the quality of products and services, and create a dynamic business environment. However, these effects are difficult to quantify and thus cannot be aggregated with the customer savings. Nevertheless, this section provides a first attempt to describe to what extent the EC has incorporated innovation as part of its enforcement activity. It gives an overview of the proportion of EC interventions (2012-2024) that were at least partially driven by concerns related to innovation or quality. This could provide a first indication of the significance of this aspect of enforcement and illustrates how neglecting it likely results in a sizable underestimation of generated benefits.

73. The analysis presented here is based on the same sample of interventions (2012-2024) used in the section on direct customer savings (see Section 4), but discerns between those cases in which an innovation or quality theory of harm (ToH) was deemed present or absent. Methodologically, this was done by scanning the press release of each decision for specific key words, followed by a more in-depth examination of these cases and consultations with the relevant case teams.

74. Overall, innovation concerns seem to be prevalent throughout the length of the sample, as illustrated by the high long-term average percentage of cases in which these concerns are investigated. This is the case for both antitrust and mergers (see Figures 8 and 9) while during the reference period innovation concerns were deemed present in only one past cartel intervention, the Car Emissions case of 2021.³⁹

75. As far as merger cases are concerned, the long-term average share of interventions where an innovation or quality concern was found is 24.6%, i.e. 58 interventions out of a total of 236. This share remained relatively stable over the period, except in 2024 when no mergers raised concerns related to innovation and quality.

76. The number of antitrust interventions with a theory of harm relating to innovation or quality amounted to 22 out of 74 cases, resulting in a long-term average of 29.7%. Here the trend is arguably positive, despite 5 years having no innovation or quality interventions.

³⁹ Case AT.40178. In this case, a number of car manufacturers were found to collude on not competing on further development and use of technologies able to reduce diesel car emissions beyond the minimum extent required by law.

Figure 8. Merger control interventions with innovation or quality concerns (2012-2024)

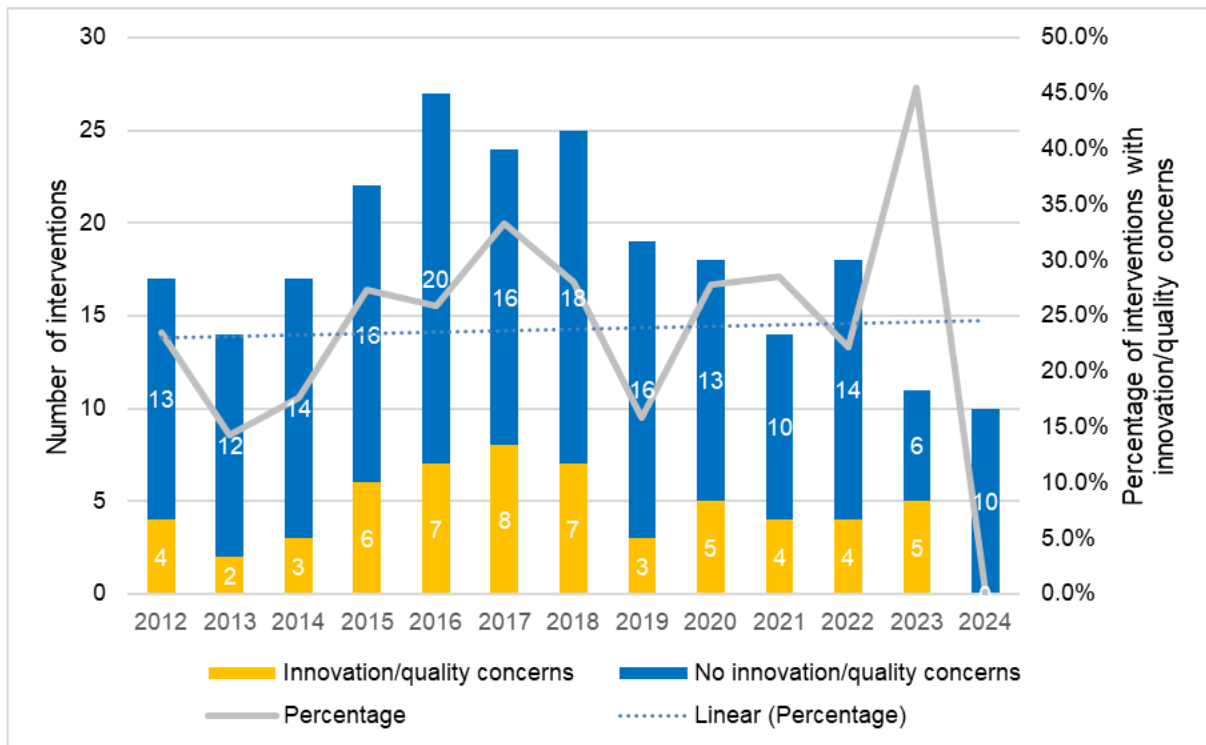
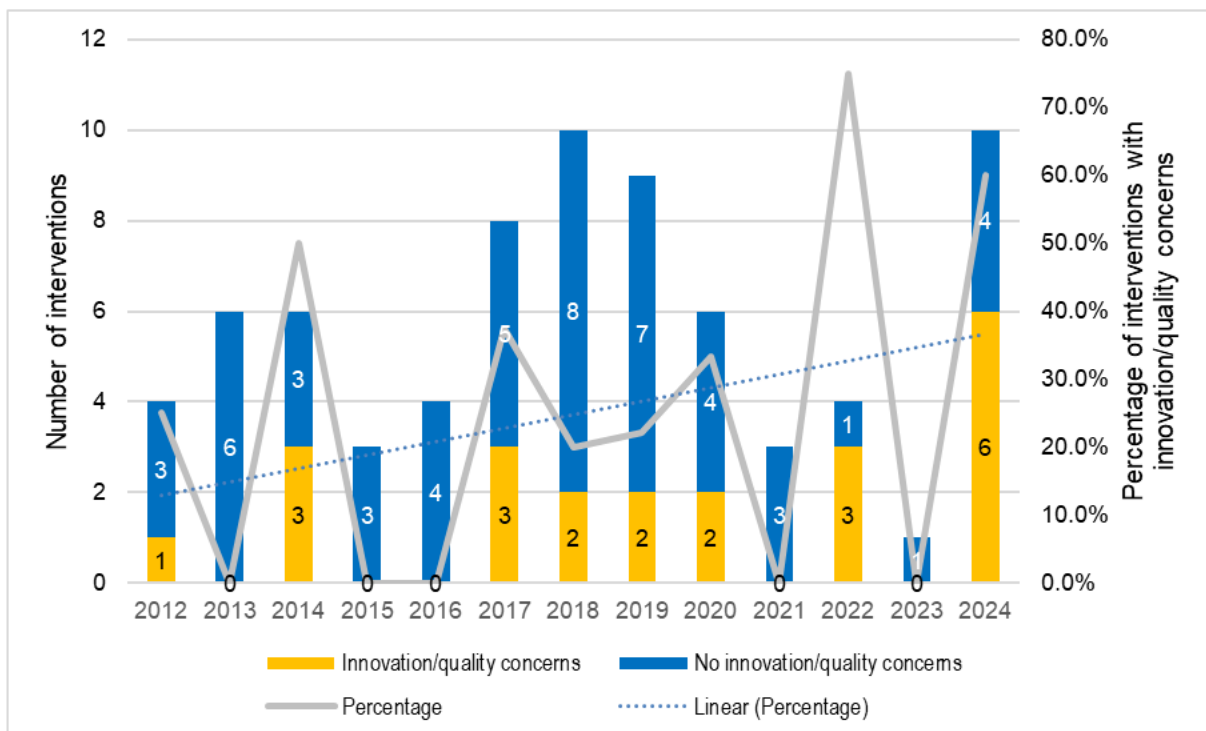


Figure 9. Antitrust interventions with innovation or quality concerns (2012-2024)



77. Potentially, further studies on the presence of innovation and quality concerns could be done in the future. Among those, one possibility would be to look at the relevant market

size of each case and try to understand, for instance, if innovation concerns are clustered in large or small cases.

8. Estimating the macroeconomic impact of competition enforcement

78. To provide a more comprehensive picture of the benefits of competition policy, DG Competition, in collaboration with the Directorate-General for Economic and Financial Affairs and the Joint Research Centre, has conducted over several years macro-modelling effort allowing to estimate the broad macroeconomic impact of EU competition policy enforcement. The model used to run the macroeconomic simulations is the QUEST III model, a Dynamic Stochastic General Equilibrium Model (DSGE), developed by the EC for assessing the impact of EU policies. The results of these simulations are published on the website of DG Competition. The last report on “Modelling the Macroeconomic Impact of Competition Policy: 2023 update and further development”, a joint work by DG COMP, the JRC and DG ECFIN⁴⁰, provides an update of the macro-model simulations of the impact of competition policy interventions of the European Commission over the period 2012-2022.

79. The macro-modelling framework considered exploits the microeconomic data used to calculate the customer savings associated with EC competition policy interventions (i.e., merger interventions, cartel prohibitions as well as antitrust interventions other than cartels) to calibrate aggregate markup shocks⁴¹, which are then applied to the QUEST III model. These markup shocks take into account not only the direct effect of the Commission’s competition policy interventions but also their deterrent effect. A novel approach⁴² is considered to simulate these deterrent effects based on models used to describe the diffusion of information which are calibrated by exploiting deterrence multipliers provided by past surveys. As mentioned in section 6 above, DG Competition has launched a new survey study on the deterrence effects of competition enforcement. When the results of this study become available, the macroeconomic simulation results may accordingly change as the deterrence multipliers are an important driver of the modelling results.

80. The economic logic of the QUEST III simulations is that the reduction in markup and prices resulting from the Commission’s competition policy interventions stimulates consumer demand, leading to investment in capacity and technology, higher productivity and employment and ultimately to an increase in GDP growth. The latest simulation results indicate that EU Competition enforcement of the type and magnitude performed over the period 2012-2022 would have a positive impact on GDP in the range of 0.6% - 1.1% in the medium to long term (which is equivalent of an uplift of EUR 100 - 180 billion in GDP terms, or EUR 500-900 per household).⁴³

81. As shown in Table 4 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

⁴⁰ European Commission (2024). Modelling the macroeconomic impact of competition policy – 2023 update and further development, Publications Office of the European Union (link).

⁴¹ In the baseline scenario of the simulations, the steady-state markup (expressed by the Lerner index) decreases by 1.164 percentage points compared to an initial (calibrated level) of 13.56 percent.

⁴² Cf. Dierx et al. (2023), quoted above.

⁴³ This latter figure was obtained using 2023 household data from [Eurostat](#).

mark-ups on future profitability is more than offset by the positive effect of the increasing demand due to the lower prices.

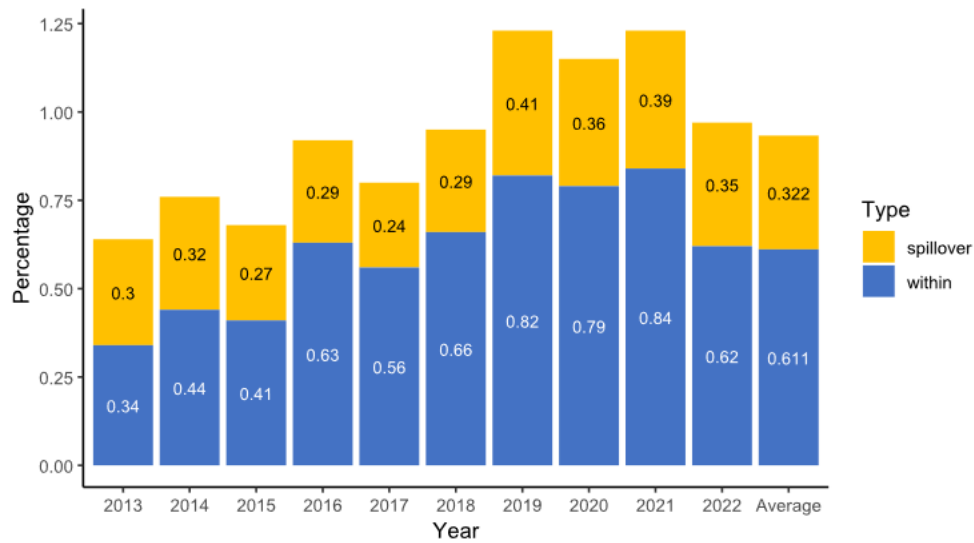
Table 4. Results of the QUEST III macro-model based on Commission’s interventions 2012-2022

	Percentage point change in the medium to long term
GDP	0.6 to 1.1
GDP deflator	-0.3 to -0.7
Consumption	0.5 to 1.0
Investment	1.1 to 1.7
Labour productivity	0.2 to 0.6
Employment	0.4 to 0.5

82. The QUEST III model is complemented by an input-output model, which explores the price effects of EU competition interventions at the industry level (distinguishing 64 branches of economic activities or industries). This input-output model, based on an input-output table of the European Union, exploits information on the sector distribution of such interventions and allows tracking interlinkages between industries. In a given industry, competition policy interventions lead to a “within-industry price effect”, encapsulating both the direct and deterrence effects with respect to that industry, and a spill-over price effect”, which arises via the input-output interlinkages with other sectors. The total price reduction resulting from competition policy interventions is the sum of these two effects.

83. On average, according to this second modelling exercise, the Commission’s competition policy enforcement is estimated to lower prices by around 0.93% over the period 2012-2022 (See Figure 10 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 10. Impact of competition policy enforcement on the overall price level



9. Conclusion

84. DG Competition considers that the 2014 OECD ‘Guide for helping competition authorities assess the expected impact of their activities’ (‘the Guide’) is a helpful and appropriately flexible tool to help competition authorities across the globe to produce annual customer savings estimates.

85. Since 2012, DG Competition – relying on a method mostly in line with the Guide – has been estimating every year the customer savings expected to result from its interventions during the previous calendar year in the areas of merger control and cartels. Since 2021, it has done the same for other (non-cartel) antitrust cases. It regularly reports these estimates in its Annual Competition and Annual Activity Reports.

86. In addition, DG Competition has started a new initiative with its partners in the European Competition Network (ECN) to produce estimates of aggregate customer savings, so as to obtain a fuller picture of customer savings from Commission and national enforcement within the EU.

87. While the reported annual customer savings are significant, they only reflect the expected directly avoided price increases and therefore only a part (‘tip of the iceberg’) of the societal benefits of competition enforcement. For that reason, DG Competition is currently investigating the likely indirect deterrent effects of enforcement on the basis of a survey of lawyers and business representatives. In addition, it has started to collect data on the extent to which effects on innovation and quality have played a key role in Commission enforcement. Both the deterrent and the dynamic effects of enforcement are likely more significant than the static price effects. Finally, DG Competition conducts annual simulations of the macroeconomic impact of the competition policy interventions by the EC.

88. DG Competition welcomes the excellent background note prepared by the OECD. The note sets out clearly and comprehensively the issues which deserve to be discussed ten years after the adoption of the 2014 Guide.

89. DG Competition sees a mix of opportunities and risks in updating the OECD guide. In DG Competition's view, the main opportunity would be to update the assumptions in the guide on the magnitude of the price effects of anticompetitive mergers and cartels. The more recent empirical literature suggests that the assumptions proposed by the 2014 Guide for both cartels and mergers may be too low. An updated guide could also provide guidance on how to assess the benefits of pro-competitive regulation, market studies or advocacy efforts and/or on how to estimate the deterrent effects of enforcement.

90. At the same time, it is important that the OECD Guide remains simple to implement and flexible. In DG Competition's view, it should not be overly prescriptive on issues which do not have a major impact on results and where several approaches can be justified. Any change should always balance its benefits and costs, bearing in mind that revising past estimates can be complex and not always possible. Therefore, modifications, if any, should strive to ensure that estimates made and published in the past, based on the 2014 Guide, remain informative and comparable to future estimates.

Annex A. Comparison of OECD and DG Competition principles for customer savings estimation

The following table provides a succinct comparison of the seven principles set out in the OECD 2014 Guide and DG Competition's approach for the estimation of direct customer savings.

OECD principles (2014 Guide)	DG Competition principles
Whenever possible, use case specific information.	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.
Assume that no intervention would have had a negative impact.	This is a key assumption in all DG Competition's customer savings calculations.
Estimate static consumer benefits and when possible, also include dynamic ones such as an increase in innovation etc.	To keep the calculation simple, DG Competition does not include dynamic consumer benefits. For all non-cartel antitrust interventions between 2012 and 2024 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.
Calculate and publish the estimates regularly.	DG Competition publishes the estimates annually as part of the Annual Activity Report and recently also in the main Competition Policy Report.
Present the results both as an annual figure and as an annual moving average over three years.	DG Competition reports both annual figures as well as figures over a longer period.
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.	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.
Give "point" estimates within a range of plausible values.	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.

Annex B. Further details on duration and turnover assumptions DG Competition

Expected duration of the avoided harm

1. DG Competition assesses the expected duration of avoided harm in **merger interventions** by estimating how long increased prices would have persisted without intervention. This assessment is case-specific, based on a questionnaire evaluating 12 indicators of market entry barriers.⁴⁴ Depending on the level of these barriers, the expected duration of avoided price increases is categorized into three tiers: “some barriers” (2 years), “significant barriers” (3 years), “extremely significant barriers” (5 years).
2. In cases involving multiple markets with different entry barriers, a single duration is typically assigned, though exceptions may apply. While the OECD uses a default 2-year assumption, DG Comp’s approach incorporates additional factors to align with findings in the economic literature.
3. For **cartel prohibitions**, DG Competition estimates how long the cartel and its effects would have continued without intervention. This is determined using a weighted approach, combining a stability score based on 11 indicators⁴⁵ with historical data on cartel duration. Stability scores are given a higher weight (65%) compared to historical duration (35%) as they appear more relevant in DG Competition’s experience. Based on this evaluation, cartels are classified as “unsustainable” (1-year duration), “fairly sustainable” (3 years), or “very sustainable” (6 years). This differs from the OECD’s standard assumption of a 3-year duration when no case-specific data is available.
4. For **antitrust interventions**, DG Competition generally assumes that positive effects last around 3 years, aligning with OECD guidance, as market power naturally erodes over time due to technological advancements, market entry, or expansion. However, case-specific information can be used to refine these estimates, and in certain instances, DG Competition has accepted longer durations based on these inputs. By incorporating case-specific data, DG Competition aims to improve the accuracy of its customer savings calculations while ensuring consistency with broader economic research.

Calculation of the expected turnover

5. In the context of competition policy, the calculation of affected turnover differs depending on the type of intervention. For **merger cases**, DG Competition, aligning with the 2014 OECD guidance, bases the estimation of customer savings on the total size of the relevant market, which includes not just the merging parties but also their competitors. This approach is justified by the assumption that mergers often influence prices across the entire market rather than being limited to the merging firms.⁴⁶ The “affected markets” are those identified by the Commission during its investigation as potentially impacted by the merger. In this regard DG Competition does not recommend to change the determination of the affected turnover for merger cases as discussed in the background document of the

⁴⁴ For an overview of the indicators, see Assessing and Communicating the Benefits of Competition Interventions – Note by the European Union, p. 12.

⁴⁵ *Idem*, p. 13.

⁴⁶ See also Stiebale and Szücs (2022), quoted above.

OECD. There are both good economic and practical (data availability) reasons for using for merger control cases the turnover of the entire market as a reference. The reason why for cartel cases only the turnover of the participating members is taken into account is not driven by economic logic, but mainly by data availability concerns.

6. In contrast, for **cartel and other antitrust interventions**, the calculation is for data availability reasons and for non-cartel antitrust for economic reasons typically limited to the annual turnover of the companies directly under investigation. This is because in cartel cases data on the turnover of the parties is always available, while data on the overall market size is rarely collected. However, in specific cartel or antitrust cases - particularly those involving oligopolistic markets - there may be evidence suggesting broader market-wide effects (so-called umbrella effects). If convincingly demonstrated by the case team, the DG Competition may then consider the sales of all market players in estimating the impact, reflecting the possibility that the intervention influences pricing beyond just the targeted companies.