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**Assessing the Impact of Competition Authorities' Activities – Background Note**

**- by the Secretariat -**

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This document was prepared by the OECD Secretariat to serve as background material for the 79th meeting of the Working Party No. 2 on Competition and Regulation on 16 June 2025.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or the governments of its member countries.

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# Assessing the impact of competition authorities' activities

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Many competition authorities conduct impact assessments to quantify the expected consumer benefits of their interventions. This paper discusses the current practice of competition authorities with regards to impact assessments and considers how the 2014 “OECD Guide for helping authorities assess the expected impact of their activities” could be updated. The guide remains a practical and widely referenced document, but there is an opportunity for revisions which would help ensure it remains relevant and credible. This paper shows that impact assessments are used by many OECD competition authorities and are a valuable tool to help communicate the benefits of competition interventions, maintain accountability with stakeholders and inform priority setting.

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# Executive Summary

Monitoring and evaluation are critical elements of good governance which help to promote public accountability, transparency, and public trust in governments. There are several approaches to evaluating the work of competition authorities. These approaches are complementary, each with its strengths and weaknesses.

This paper focuses on the approach to quantifying the expected impact of competition agencies at the time of intervention, known as “impact assessments”. Impact assessments aim to provide clear and measurable estimates of the expected benefit of a competition authority’s interventions.

Impact assessments estimate the scale of the benefit of interventions in monetary terms, building on activity measures such as counts of interventions. This provides a simple understandable number which can then be compared to budgets to demonstrate value for money.

An increasing number of competition authorities conduct these exercises to assess the expected impact of their interventions. In 2014 the OECD published a guide to help authorities conduct impact assessments. The guide is a straightforward and flexible tool with practical information to assist authorities in measuring their impact. Over ten years later, there is the potential for this guide to be updated to reflect any new developments in authorities’ practices and ensure it remains relevant.

This paper is set out as follows:

- Section 1. provides an overview of the purpose and benefits of conducting impact assessments.
- Section 2. summarises competition authorities’ current approaches to quantifying the impact of their interventions, highlighting the extent of divergences in approach as well as views from agencies on how the current guidance could be improved.
- Section 3. discusses the assumptions set out in the 2014 guidance and considers whether there is any evidence including from academic literature and current practice to revise the current levels of assumptions proposed in the absence of case specific data.
- Section 4. discusses whether the guide could be expanded to be more specific in some areas to encourage coverage of approach, as well as covering additional areas such as advocacy and even the deterrent effect of cases.

The paper concludes that impact assessments remain a valuable tool in conjunction with other approaches to evaluations to help communicate the benefits of competition interventions and maintain accountability with stakeholders.

The OECD’s guidance document remains a practical and widely referred to document but there is an opportunity for revisions which would help to ensure it remains relevant and credible. A revision of the guidance is justified by the age of the existing guidance, the gaps in the guidance highlighted by competition authorities and its broad use. It also provides an opportunity to encourage harmonisation of approaches where appropriate.

The paper proposes some potential options for revisions including adjusting the assumptions currently included in the guide and expanding the discussion to cover more areas, such as approaches to assess the impact of market studies and advocacy. These proposals include:

- Adding clarity on how the assumptions should be applied to different types of categories of cases. For example, the suggested cartel assumptions could be specified to include only hard core restrictions, such as price fixing, market sharing and bid rigging. The guidance could then include potentially lower price effect assumptions suggested for non-hard core cartel cases and vertical agreements.
- Revising some of the price effects assumptions to be more in line with the academic literature while remaining conservative. For example, considering increasing the hard core cartel price effect assumption to 15% and including an additional higher assumption for concentrated horizontal mergers.
- Considering revising the suggested treatment of the relevant revenue calculations to be consistent across all case types. For example, for mergers calculating based on the merging parties' relevant revenue on a conservative basis.
- Considering whether the assumed duration for merger cases should be revised upwards given most authorities would be likely to clear a merger if there was likely full successful entry within two years.
- Expanding the guidance to be more specific, for example with regards to the treatment of appeals, withdrawn mergers and use of discounting, as well as including discussion of the potential for assessing the impact of advocacy, market studies and effects beyond the direct price impact.

# 1. Purpose of impact assessments

1. Competition authorities are increasingly called upon by governments to deliver broader economic benefits. At the same time, they are being required to justify budgets which have often grown as remits and case complexity have expanded (OECD, 2025<sup>[1]</sup>). It is therefore worth reflecting on how competition agencies best demonstrate the benefits of their interventions and maintain accountability with the public.

2. There are several approaches to evaluation including stakeholder surveys and conducting ex-post evaluations, which are detailed reviews of a particular case or policy. Impact assessments (also referred to as “ex-ante evaluation of activities”, “outcomes measurement,” or “assessing customer benefits”) are separate and complementary to ex-post assessments, which use data collected after an intervention to assess the outcome of the decision (OECD, 2016<sup>[2]</sup>). Since impact assessments aim to cover most interventions and are conducted at the time of the intervention, they are simpler but rely on several assumptions including that the decision to intervene was the correct one.

3. Impact assessments focus on the direct customer benefits from interventions. The approach measures the savings to customers from avoided future price increases (merger intervention) or from the expected price decreases following an intervention to stop a cartel or other anticompetitive conduct. The calculation involves estimating the expected price effect, the duration of the price effect and the value of affected turnover to come up with an overall customer benefit estimate. These estimates are then typically aggregated for different categories of cases such as mergers, cartels and abuse of dominance, as well as an overall impact estimate.

4. In recent years estimates published by 20 competition authorities demonstrate that in aggregate their interventions have led to over USD 29bn of direct annual customer benefits.<sup>1</sup>

5. Competition authorities measure and quantify the expected impact of competition interventions for a variety of reasons. These include improving transparency and communication to the public, demonstrating value for money, advocating for resources to be allocated to competition policy and setting priorities. The following sections explore some of the reasons for using impact assessments.

## 1.1. Transparency and communication

6. Communicating the benefits of effective competition enforcement can help competition authorities to achieve their goals by promoting competition, enhancing transparency and building strong relationships with stakeholders (OECD, 2023<sup>[3]</sup>).

7. The benefits of competition policy and enforcement are often intangible and difficult for the public to understand (ICN, 2017<sup>[4]</sup>). For example, preventing a merger that could lead to higher prices is a good outcome for consumers, but it typically preserves the existing situation, the effect of the decision is therefore hard for consumers to perceive. Similarly, downstream consumers may not be aware of the impact on their price and choice from shutting down a cartel of an industrial input.

8. As it is often difficult for stakeholders to directly observe the benefits of competition interventions, it is important to try and communicate the benefits in a way which is easy to understand.

9. Impact assessments can be a valuable tool in communicating the benefits of competition authority activities because they seek to provide a simple quantified monetary assessment which stakeholders, including end consumers, can easily understand. The results of impact assessments can be communicated in a variety of ways.

10. Most commonly the results of impact assessment are published in annual reports, although several authorities also publish standalone publications of the results. Many authorities use the quantifications of benefits prominently in press releases and as part of broader press strategies. As the impact assessment results are simple estimates of the expected effect of interventions, it is also important that the methodology followed by authorities is conservative in its approach but also publicly available so that others can review the approach, and the estimates retain credibility and trust.

11. Impact assessments will form only one small part of agencies evaluation and communications approaches. In 2023 the OECD held a roundtable discussing the full range of approaches to communicating the benefits of competition interventions. Box 1 sets out a summary of the key communication objectives and tools used by competition authorities.<sup>2</sup>

### Box 1. Communication by competition authorities; objectives and tools

#### Communication objectives and stakeholders

The objectives of competition authorities' communications may vary across jurisdictions, depending on a range of factors. There are however three communication objectives competition authorities typically have in common:

- Advocate for competition, increase awareness of and compliance with competition law
- Build reputation and trust
- Increase transparency, accountability and predictability

Competition authorities interact with a wide range of stakeholders, and it is important to tailor the message depending on the objective the authority wants to achieve and the audience. Three key stakeholder groups include businesses, government and the public. Communication is more effective when it recognises the stakeholder's needs and concerns and helps build a positive relationship.

#### Communication tools used by authorities

Tools to communicate effectively may vary depending on the objectives, the audience and the context. Some of the key communication tools are summarised below:

- **Communication of daily activity** - Competition authorities use various media channels and press releases to provide regular updates about their activities, including new investigations, enforcement actions, and policy developments.
- **Mission statements** - Some authorities publish mission statements to articulate their goals, values, and priorities, promoting transparency and accountability.
- **Workplans** - Publishing documents about priorities and workplans can help build trust in the authority as well as increasing transparency, accountability, and predictability.
- **Periodic reporting on the agency's** - Regularly reporting on activities (e.g. via Annual Reports) increases transparency and shows accountability, demonstrating effective use of resources.
- **Evaluation of the activity of competition authority** - Evaluating their activity and communicating the results of the evaluation helps ensuring the authorities are fulfilling their mandate effectively, increases transparency in their decision-making process, and enhances trust in the authority and its work.

- **Campaigns** - One of the key tools to increase awareness of and compliance with competition law is to conduct campaigns, defined as planned sequences of communications with a specific narrative over a limited period, to educate businesses, consumers, and other stakeholders
- **Events to advocate for competition policy** - Events represent a platform to share knowledge and ideas and give an opportunity to all stakeholders to engage with the authority. This helps competition authorities to build reputation and trust.
- **Plain language initiatives** - Using plain language makes communication more effective and accessible, preventing misunderstandings and increasing compliance.

Source: OECD (2023<sup>[3]</sup>), Communication by competition authorities: Objectives and tools OECD Competition Policy Roundtable Background Note, <https://doi.org/10.1787/944bbdac-en>.

## 1.2. Demonstrating value for money

12. As well as generally helping to demonstrate transparency and communicating the benefits of competition, the output from impact assessments can allow comparisons with the costs of an agency's budget and help the agency demonstrate value for money.

13. For example, in the forward to the Competition Council of Latvia's annual report (Competition Council of Latvia, 2023<sup>[5]</sup>) the Chairman's foreword includes an estimate of the public benefit and states:

*"Compared to the Authority's budget, each euro allocated to the Authority has generated a public benefit of around EUR 20."*

14. Typically, authorities conduct impact assessments on a voluntary basis and results are often communicated in annual reports or as stand-alone publications. Other agencies report estimates to oversight bodies. For example, in the United States certain measurable benefits of the Federal Trade Commission and the Antitrust Division of the U.S. Department of Justice's interventions are included in annual Congressional Submissions (OECD, 2023<sup>[6]</sup>).

15. Some authorities are mandated to assess their impact and have targets to meet. For example, the UK's Competition and Markets Authority (CMA) is required to calculate and publish its impact. It is required to demonstrate that it has delivered against a target of expected direct financial benefits to consumers is at least ten times its relevant costs to the taxpayer measured over a rolling three-year period (CMA, 2024<sup>[7]</sup>). Table 1 shows an example from the CMA's recent assessment it published demonstrating that the direct consumer benefits to its interventions was estimated to be over 23 times greater than the cost.

**Table 1. Example of competition authority publishing the costs vs benefits of interventions**

An example of an agency publishing tables demonstrating the benefit of interventions against the cost.

Area of CMA work	Direct Benefits (GBP)
Competition enforcement	123.5
Consumer protection enforcement	175.2
Merger control	685.2
Market studies and market investigations	1764.7
Total benefits	2748.5
Costs	118.8
Benefit/costs	23.1:1

Source: CMA (2024<sup>[7]</sup>), CMA Impact Assessment 2023 to 2024, [https://assets.publishing.service.gov.uk/media/66a89fd5fc8e12ac3edb069f/CMA\\_Impact\\_Assessment\\_2023\\_to\\_2024.pdf](https://assets.publishing.service.gov.uk/media/66a89fd5fc8e12ac3edb069f/CMA_Impact_Assessment_2023_to_2024.pdf).

16. Having a framework against which budgets can be compared can also be an important tool when authorities are negotiating budgets with government. For example, the first chief executive of a new competition agency in Mauritius, noted in his personal reflections on measuring the outcomes from competition agencies interventions (Davies, 2018<sup>[8]</sup>) that:

*“Committing to publish outcome measures ... was an important part of the negotiations that persuaded the Government to provide adequate funding to the nascent competition agency”*

### 1.3. Setting priorities and the limitations of impact assessments

17. Having estimates of the direct customer benefit generated by different enforcement interventions can support an authority’s efforts to measure and further improve its performance over time in terms of output, impact and priority setting. By quantifying the effect of interventions, authorities can get a better idea of which interventions have the greatest impact. This can help authorities to assess in what areas they get the best return in terms of outcomes. It can also help authorities justify spending resources on larger and more complex cases which might have bigger impact, but which may lead to lower activity case counts if that is the only outcome measure used.

18. However, when using impact assessments as an input into priority setting, great caution should be taken and the limitations of the quantification should be considered (Davies, 2018<sup>[8]</sup>). These limitations include that:

- The authority’s decision to intervene may have been wrong or market developments may have changed the outcome of the intervention.
- Benefits outside of direct price effects are not typically considered, including longer term dynamic effects and the effects of interventions deterring future anti-competitive behaviour.

19. If undue weight is placed on impact assessments it risks:

- authorities over-enforcing as the more enforcement it concluded the greater the estimated impact due to the assumption that decisions are correct.
- authorities prioritising cases where the impact is easier to measure. This could lead to authorities placing too little focus on cases which primarily generate indirect or deterrent effects. In such a situation, authorities might start conducting more forward-looking interventions where the expected calculated direct effects might be higher rather than cases where much of the effect of the intervention is likely to be from preventing future misconduct. Similarly, it may deter authorities from taking smaller cases which might have large deterrent effects for certain segments and instead focus only on the biggest cases.

20. Given the potential distortions and limitations impact assessments should be considered only as one factor when assessing agency output and effectiveness.

## 2. Competition authority practice

21. Competition authorities' approaches to impact assessments were most recently discussed by the OECD Competition Committee (Working Party No. 2 on Competition and Regulation) in a 2023 Roundtable on *Assessing and Communicating the Benefits of Competition Interventions* (OECD, 2023<sup>[3]</sup>). An issues paper was circulated to Working Party No. 2 as background material highlighting the developments in competition impact assessments since 2014 and several authorities provided responses to questions set out in said paper.

22. This section discusses the approaches authorities currently undertake to impact assessments. It is primarily based on the submissions to the 2023 Roundtable on *Assessing and Communicating the Benefits of Competition Interventions* (OECD, 2024<sup>[9]</sup>), responses to questions in the 2023 issues note (OECD, 2023<sup>[10]</sup>), as well as a review of competition authorities websites and annual reports.

### 2.1. Prevalence of impact assessments

23. An increasing number of competition authorities conduct impact assessments of their interventions. In total at least 20 authorities have conducted such assessments in recent years. These authorities cover many different regions, legislative regimes, and sizes of authorities.<sup>3</sup> There has been growth in the European Union where the Directorate-General for Competition (DG COMP) has been leading an initiative to encourage European Competition Network (ECN) members to quantify consumer benefits across Europe (European Commission, 2022<sup>[11]</sup>).

24. Several authorities do not carry out impact assessments or do not publish them in annual reports. Reasons for not calculating or not publishing the benefits of competition interventions include lack of resources, limited data availability or confidentiality concerns (OECD, 2023<sup>[10]</sup>).

25. Jurisdictions which do not conduct impact assessments typically use other methods, such as publishing case counts and summaries as part of annual reports, to maintain transparency and demonstrate value. Some, such as Argentina, also noted that implementing the OECD impact assessment methodology was something they were looking to develop in the future (OECD, 2023<sup>[12]</sup>).

### 2.2. Current approaches used by competition authorities

26. Most jurisdictions which undertake impact assessment broadly follow the same principles as those set out in the OECD guide for helping competition authorities assess the expected impact of their activities (OECD, 2014<sup>[13]</sup>). This guide sets out the general principles and the methodology for calculating the benefits accruing from the activity of the authorities. It was developed drawing on the experience of five authorities that, at that time, were conducting and publishing a regular annual impact assessment. A summary of the guidance is set out in Box 2.

## Box 2. Overview of guide for helping competition authorities assess the expected impact of their activities

### Scope of the assessment

- Include as a minimum the impact of all decisions relating to blocked mergers, mergers approved with remedies and cartels.
- Cover all the decisions listed above taken over the course of the previous year.
- Account for the benefits accrued to consumers, these can be intermediate or final consumers depending on the market.

### General principles

The guide suggests several guiding principles:

- Whenever possible use case-specific information.
- Assume that no intervention will have a negative impact.
- Estimate static consumer benefits and when possible also include dynamic ones.
- Calculate and publish the impact assessment regularly.
- Present the results both as an annual figure and as an annual moving average over three years.
- Present the results by type of decisions, when possible.
- Give 'point' estimates within a range of plausible values.

### Methodology

To assess the static consumer benefits resulting from decisions, the approach suggests estimating:

- The size of the affected turnover.
- The price increase removed or avoided.
- The expected duration of the price effect.

The total benefit is the product of these three figures aggregated across the relevant period.

### Assumptions

To the extent case specific data is not available the guidance suggests using the following assumptions.

Assumptions	Cartels	Abuse of dominance	Mergers
Size of affected turnover	Ex-ante turnover of the companies under investigation in the affected markets		Ex-ante turnover of all the firms in the affected markets
Price effects	10%	5%	3%
Duration (years)	3	3	2

Source: OECD, (2014<sub>[13]</sub>) Guide for helping competition authorities assess the expected impact of their activities, <https://doi.org/10.1787/c92c2cd0-en>.

27. In conducting impact assessments, authorities will typically seek case specific data as inputs for their calculations. However, it is important for the calculations to remain straightforward and for estimates to be made at the time of a decision therefore case specific data is often not available. Where data is not available assumptions can be used as highlighted by the OECD guidance (OECD, 2014<sub>[13]</sub>). The

assumptions in the methodologies used by competition authorities where case specific information is not available typically refer to the OECD guidance, the practice of other authorities and academic literature.

28. Most jurisdictions appear to follow the OECD guidance in relation to the approach to selecting the appropriate turnover to apply the calculation. That is, authorities tend to apply the price effect to only the relevant product revenues of the companies under investigation rather than the whole market revenue for cartels and abuse cases but to a broader market in mergers. Although the language used in published methodologies is not always clear as to the practice followed.

29. The key metrics used for the calculations are typically the avoided price markup from interventions (anticompetitive mergers) or expected price reduction from interventions (cartels or abuse cases), the expected duration of the price impact and the affected revenue of the conduct. Most authorities use assumptions which vary between cartels, mergers and abuse of dominance cases. The following section sets out a summary of the assumptions used by authorities for these different case types covering price effects and duration. Annex A also sets out the specific assumptions used by each jurisdiction based on the OECD's research.

### ***2.2.1. Assumptions used by authorities for cartels***

30. For calculating the impact of cartel enforcement most authorities assume on a conservative basis that there is a 10% price effect of an intervention stopping a cartel. This is in line with the current OECD guidance. However, many EU jurisdictions have begun following a methodology developed by DG COMP and are now calculating estimates as a range including 15% for their higher estimate.<sup>4</sup> A few authorities outside of the EU have also used the 15% estimate as their central assumption.<sup>5</sup>

31. The other key assumption in calculating the impact of a cartel is estimating how long it would have continued absent the intervention. Like the assumptions on price effects, most authorities use an assumption that a cartel would continue for another three years absent the intervention in line with OECD guidance. There is however some variation with some authorities assuming a duration of only one year and at least one authority using six years.<sup>6</sup> Other jurisdictions also use ranges which assume one year for the lower estimate and six years for the higher estimate. DG COMP (in line with the OECD guidance principal of using case specific information), decide whether to use higher or lower estimates on a case-by-case basis depending on case handler views on the stability of the cartel, with higher duration assumptions used where cartels are more stable.<sup>7</sup>

### ***2.2.2. Assumptions used by authorities for mergers***

32. When calculating the impact of merger cases authorities assume that their intervention has prevented an anticompetitive merger which would have led to a price increase in the absence of the intervention. Most authorities assume a 3% price increase has been avoided by intervening, in line with the OECD guidance although there is variation. Mexico (OECD, 2023<sub>[14]</sub>) and the US competition agencies (OECD, 2023<sub>[6]</sub>; 2013<sub>[15]</sub>) for example assume only a 1% price increase was avoided or conduct merger simulations, whereas Hungary assumes 5% (Hungarian Competition Authority, 2023<sub>[16]</sub>). Several authorities also use ranges, typically with a higher estimate at 6% and lower estimate at 1%.<sup>8</sup>

33. While several authorities assume that, if no case specific data is available, the anticompetitive effect for a merger would last two years, in line with the OECD guidance, several jurisdictions assume the effect would last three years and others assume only one year.<sup>9</sup> Some jurisdictions such as DG COMP also use ranges with upper bound estimates of five years and lower estimates of two years based on the level of barriers to entry in the market.<sup>10</sup>

### 2.2.3. Assumptions used by authorities for abuse of dominance cases

34. When it comes to abuse of dominance cases most authorities use a 5% price effect assumption and 3-year duration assumption in line with the OECD's 2014 methodology guidance. However, several also estimate a range including a higher 10% effect and 6-year duration.<sup>11</sup> Hungary uses 10% as their central assumption, (Hungarian Competition Authority, 2023<sup>[16]</sup>) and Mexico (OECD, 2023<sup>[14]</sup>) uses a 15% assumption although combined with only a 1-year duration. The US DOJ uses the lowest assumptions with a 1% price effect and 1 year duration (OECD, 2023<sup>[6]</sup>; OECD, 2013<sup>[15]</sup>), although several jurisdictions also adopt these parameters as lower estimates when calculating ranges.

## 2.3. Other differences in approach

### 2.3.1. Different categories

35. While the OECD guidance includes suggested approaches to mergers, cartels and abuse of dominance cases, the methodology is silent in other areas and on defining exactly what cases should fall into these definitions. The approaches of competition authorities vary in relation to the categories used, especially in areas the OECD guidance is silent on. This section highlights some of the different approaches taken by authorities in these areas.

#### *Approaches to retail price maintenance (RPM) and other vertical agreements*

Some jurisdictions such as Türkiye have begun to treat retail price maintenance cases in its impact assessments utilising the same assumptions as for cartels (OECD, 2023<sup>[17]</sup>). They said this was because it was observed that in these cases there is a significant difference between the prices applied in periods where RPM was implemented than in normal periods with very similar negative results to cartel behaviour. The Hungarian authority applies the default values recommended for cartels or abuses of dominance in case of resale price maintenance depending on the case characteristics (Hungarian Competition Authority, 2023<sup>[16]</sup>). Other jurisdictions have separate lower assumptions for vertical cases, for example France applies a 2.5% assumed price effect to assess vertical agreements (OECD, 2023<sup>[18]</sup>).

#### *Advocacy and market studies*

36. Several authorities have also begun to include approaches for advocacy and market investigations. For example, the CMA have also assessed benefits to consumers arising from market studies (CMA, 2024<sup>[7]</sup>). Given the variety of market studies, they use ad-hoc methodologies that vary from case to case to assess consumer benefits arising from this activity.

37. With regards to advocacy several authorities have started including assessments of the benefit from preventing or amending anticompetitive regulations. For example:

- Latvia includes impacts of soft enforcement including market monitoring studies as well as advocacy, such as the positive effect of the changes proposed by the Latvian Competition Council in regulatory acts on an ad hoc basis. In these cases, it uses a symbolic 0.5% avoided price increase (OECD, 2023<sup>[19]</sup>).
- Lithuania includes an assessment of the impacts of recommendations, which lead to the removal of restrictions on competition, for example, preventing changes to the road transport act which granted unreasonable privileges to some economic operators (OECD, 2023<sup>[20]</sup>).

### **2.3.2. Successful appeals, commitments and withdrawn mergers**

38. There are also different approaches by authorities when it comes to which types of decisions should be included in the calculations.

39. It is typical for authorities to include cases in their calculations in the year the decision was made even when they may still be under review or appeal.<sup>12</sup> This reflects the fact that often such decisions can be made many years later and a desire for the impact to be recorded at the most relevant period. However, there is divergence between authorities as to the most appropriate approach to take following decisions being overturned on appeal. The EU and Italy for example, do not typically adjust past results, they highlight that this keeps the analysis simple and consistent over time. The EU also highlighted that removing cases from past years in the series would mean that the most recent year becomes incomparable with past years as the most recent year may include some cases which will potentially be later overturned (OECD, 2023<sub>[21]</sub>). Other jurisdictions such as Hungary (Hungarian Competition Authority, 2023<sub>[16]</sub>) and the Netherlands (ACM, 2014<sub>[22]</sub>) have sought to revise historical calculations following successful appeals.

40. For mergers which have been abandoned after initial investigation most authorities include the effect of the abandonment in the calculations to some extent.<sup>13</sup> Authorities noted that in many cases these mergers were abandoned because of the authority raising concerns. However, the approach to this treatment is inconsistent and others such as Hungary do not include cases in their calculation where the parties withdrew their application for a merger (Hungarian Competition Authority, 2023<sub>[16]</sub>).

41. Similarly, some authorities have different approaches when it comes to informal interventions or commitments. Jurisdictions such as Italy (OECD, 2023<sub>[23]</sub>) and France (OECD, 2023<sub>[18]</sub>) use different assumptions when cases are closed through commitments. Both assume a 1% price effect for abuse and vertical agreements, but there is divergence on horizontal agreements France still uses 1% but the Italian authority uses 2% for commitments on horizontal agreements. Hungary includes commitments on merger cases because commitments are accepted at the end of an investigation. However, it excludes commitments for non-merger cases as these cases are terminated before a conclusion of illegality and so there is not sufficient certainty that such proceedings have led to direct welfare benefit (Hungarian Competition Authority, 2023<sub>[16]</sub>).

### **2.3.3. Time horizons**

42. There does not seem to be a consistent approach when it comes to the time period and frequency of assessment of impact assessments.

43. Some authorities such as the Italian competition authority (OECD, 2023<sub>[23]</sub>) and the UK competition authority (CMA, 2024<sub>[7]</sub>) measure their impact annually and often include a 3-year rolling average in line with the OECD guidance.<sup>14</sup>

44. Other jurisdictions seek to calculate the effect over a longer period. For example, the Hungarian Competition Authority appears to assess results over a six-year period (Hungarian Competition Authority, 2023<sub>[16]</sub>) and the Irish competition authority looked back at a 4-year period and to account for work which often includes large multi-annual cases (CCPC, 2022<sub>[24]</sub>). The EU also looked at the annual impact and a longer 10-year period (European Commission, 2025<sub>[25]</sub>).

### **2.3.4. Time value of money**

45. There is also a mix of approaches when it comes to discounting estimates to consider the time value of money (that is the effect that there is greater value is placed on receiving a sum of money now rather than an identical sum later on). Some authorities such as the EU do not include adjustments for discounting (OECD, 2023<sub>[21]</sub>). However, many authorities use discount rates which are often based on the jurisdictions treasury guidance for discount values to use.

46. Table 2 shows some of the discount rates used by authorities.

**Table 2. Discount rates used by authorities**

Country using discount rate	Discount rate used
France	3.2%
Hungary	3.5%
Iceland	3.5%
Ireland	4%
Lithuania	5.5%
Latvia	5%
Spain	3%
UK	3.5%

Sources:

OECD (2023<sup>[18]</sup>), *Assessing and Communicating the Benefits of Competition Interventions - Note by France, Working Party No. 2 on Competition and Regulation*. OECD Unclassified document, [https://one.oecd.org/document/DAF/COMP/WP2/WD\(2023\)2/en/pdf](https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)2/en/pdf)

Hungarian Competition Authority (2023<sup>[16]</sup>), *Ex-Ante assessment of the welfare gains achieved by the GVH*, [https://www.gvh.hu/pfile/file?path=/en/gvh/analyses/ex\\_ante\\_impact\\_assessment/GVH\\_Impact\\_ass\\_2017-2022\\_2022\\_12\\_31\\_-\\_ExternalDoc\\_-\\_final\\_2023\\_04\\_12\\_exchrte\\_updt\\_a.pdf1&inline=true](https://www.gvh.hu/pfile/file?path=/en/gvh/analyses/ex_ante_impact_assessment/GVH_Impact_ass_2017-2022_2022_12_31_-_ExternalDoc_-_final_2023_04_12_exchrte_updt_a.pdf1&inline=true)

OECD (2023<sup>[20]</sup>), *Assessing and Communicating the Benefits of Competition Interventions - Note by Lithuania, Working Party No. 2 on Competition and Regulation*. OECD Unclassified document, [https://one.oecd.org/document/DAF/COMP/WP2/WD\(2023\)8/en/pdf](https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)8/en/pdf)

Competition Council of Latvia (2023<sup>[5]</sup>), *Annual report of the Competition Council of Latvia*, <https://www.kp.gov.lv/en/article/cc-publishes-report-its-work-2023>.

Sales, Cruz and Ugarte (2023<sup>[26]</sup>), "Impact of the CNMC's antitrust interventions: methodology and estimation for the period 2012-2022", *ICE Journal of Economics*, <https://revistasice.com/index.php/ICE/article/view/7608>

CMA (2024<sup>[7]</sup>), *CMA Impact Assessment 2023 to 2024*,

[https://assets.publishing.service.gov.uk/media/66a89fd5fc8e12ac3edb069f/CMA\\_Impact\\_Assessment\\_2023\\_to\\_2024.pdf](https://assets.publishing.service.gov.uk/media/66a89fd5fc8e12ac3edb069f/CMA_Impact_Assessment_2023_to_2024.pdf)

CCPC (2022<sup>[24]</sup>), *CCPC-Competition-Impact-Assessment*, <https://www.ccpc.ie/business/wp-content/uploads/sites/3/2022/06/2022.06.02-CCPC-Competition-Impact-Assessment.pdf>

Icelandic Competition Authority (2024<sup>[27]</sup>), *Calculated benefit from the Competition Authority's intervention, description of methodology and assumptions*, <https://www.samkeppni.is/media/skyrslur-2024/Skyrsla-nr.-3-2024.pdf>

### 2.3.5. Deadweight loss

47. As well as adjusting for the time value of money, authorities can also consider adjusting their calculations to account for potential changes in demand caused by the intervention changing prices. For example, if an intervention leads to a price reduction not only will the existing customers benefit by receiving lower prices, but customers who did not previously make purchases may now do so and grow the size of the market.

48. Most jurisdictions do not appear to account for this factor likely because it may be a relatively small effect and requires assumptions on demand elasticity. A few jurisdictions do attempt to do so. For example:

- The Mexican competition authority has said it seeks to take into account the impact of changing demand on the calculation if information is available on market demand parameters such as elasticity (OECD, 2023<sup>[14]</sup>).
- The Irish competition authority in its 2022 impact assessment assumed a low elasticity of 0 in cartel and other enforcement cases and -0.5 in mergers and high elasticity of -2 (CCPC, 2022<sup>[24]</sup>).

# 3. Potential revisions of guidance assumptions

49. As highlighted in Box 2, the OECD guidance on impact assessments provides potential assumptions relating to the three main figures required for a case impact assessment calculation:

- the affected revenue/turnover
- expected price effect
- expected duration of the infringement

50. Competition authorities can rely on these assumptions in situations where case specific data is unavailable. These assumptions were primarily based on the practice of the authorities conducting impact assessments prior to 2014. Now more than ten years on it is worth considering whether these assumptions, which are widely used by many authorities, remain the most appropriate.

51. Following the 2023 Issues note, (OECD, 2023<sup>[10]</sup>) 11 jurisdictions responded to the OECD's questions set out in the paper. Most of the respondents were in favour of updating the OECD's guidance and some of the reasons authorities gave for the guide to be updated included to updating the assumptions in the guide to reflect the economic literature that has emerged on the magnitude of price effects of cartels and mergers, maintain an up-to-date reference for authorities and reflect any changes in authority practice.

52. This section first considers the appropriate revenue figures any assumptions of price effects and duration should be applied to, before considering what is meant by a conservative benchmark to utilise when considering the empirical evidence for price effects and duration. It then considers for each case type, the empirical evidence available for making any adjustments to the assumptions set out in the guidance.

## 3.1. What revenues should the calculations apply to?

53. The current assumption suggested by the OECD guidance is to base the impact calculation for a cartel on the revenue of the cartelists from the affected products/services. Practically this makes sense as the revenue data for the firms involved is likely to be data by the authorities whereas data for the broader market may not necessarily be readily available.

54. The cartelists' revenue is likely lower than the actual level of revenue affected by the cartel. This is because cartelists will not necessarily cover 100% of any market. However, the impact of the cartel is likely to be felt across the whole market.<sup>15</sup> This is because even where the non-cartel firms are not price takers, they will rationally adapt their pricing strategy in response to the other prices in the market. This effect is often referred to as the umbrella effect (Inderst et al., 2013<sup>[28]</sup>). The extent to which non-cartelists adjust their prices may not be to the same extent as the price effect on the cartel. Therefore, it would seem appropriate to keep the current approach on a conservative basis. The same approach is also suggested for abuse of dominance cases.

55. With regards to merger interventions the current OECD guidance is to apply the assumed averted price increase to total market revenues in which the merger is taking place. Such data is more likely to be readily available from a merger assessment. Although all firms in a market may increase prices because of an anticompetitive merger, it is not necessarily the case that they would do so to the same degree as the merging parties.

56. Currently the approach of applying the price effect to the whole market may risk not being seen as conservative and there is not a theoretical reason for applying a different practice to cartels. Therefore, it would seem an appropriate option when revising the guidance to have a similar approach in mergers as to cartels and abuse cases where case specific information does not provide fuller information.

### 3.2. How 'conservative' should assumptions be?

57. In relying on assumptions rather than case specific data, it is widely agreed that assumptions should be conservative. Conservative is a relative term but means that any estimates are intentionally cautious and so unlikely to be overestimates. The aim of such an approach is to ensure that estimates remain credible and are not seen to be overinflating the impact of the authority. This is particularly important given that the estimates already assume that all decisions to intervene are correct.

58. When selecting appropriate assumptions there is often a range of different results to consider both from theoretical and empirical research. For example, the assumptions on duration and price effects for cartels and mergers can be informed by a wide number of past cases for which ex-post assessments have been conducted. Each specific case will have a different result creating a distribution of estimates to consider.

59. For estimates to be conservative, choosing assumptions that are higher than expected on average based on historical examples is not appropriate, but there remains a question of where in the distribution of likely outcomes the chosen assumptions should lie. There is a trade-off between, on the one hand, loss of accuracy leading to underestimation of the customer benefits in the long run, versus the risk of any one estimate being assumed to be higher than it should be. In the case of impact assessments, it is important that the aggregate estimates published are not overstated rather than any individual case estimate.

60. In assessing the distribution of historical results to inform assumptions there are several different measures on which could be considered as a benchmark:

- **Arithmetic mean** – this would place weight on all the historical estimates in a sample and is therefore likely to be the most accurate predictor unless there is some reason the sample of cases is biased in some way.
- **Median** – the median is the midpoint of the distribution and so if selecting randomly would mean there is an equal probability of selecting a value higher or lower than the estimate. The benefit to using the median is that if there are a small number of more extreme values. These values do not significantly impact the estimate.
- **Lower quartile or another percentile lower than the median** – moving further down the percentiles would further reduce the risk of overestimation, however, this requires a relatively arbitrary selection to be agreed and as many of the published studies focus on means and median the benchmarking data may be harder to come across.
- **Lowest value** – another option would be to select the lowest feasible historical estimate which would lead the estimates almost certainly being underestimates.

61. In thinking about how low down the distribution assumptions of price effect and duration should be made it is worth also considering that there are several factors which will lead to the estimates of agency effect already being on the low side, for example:

- The current approaches to impact assessments focus on assessing only the direct price effects. As discussed in section 4, other indirect effects such as the deterrent effect, and dynamic effects on innovation are likely to be many times larger than this direct effect.
- For cartels and abuse cases the proposed assumption on revenue means the calculation is applied to a smaller proportion of the market than the actual effect and the calculations do not consider the additional benefits of market expansion as prices fall.

62. However, on the other hand there is the assumption that all decisions are correct which is likely to lead to some cases potentially being wrongly counted.

63. There are also many approaches to conducting research of meta-studies of ex-post reviews and many will cover different samples and make different adjustments. There will therefore be a range of results each with different estimates of means and medians. There is therefore also scope to be conservative in selecting between a range of estimates from different but equally regarded studies.

64. In selecting an appropriate figure, the interactions between the assumptions are also worth considering. If every assumption is on the low side multiplying them together can lead to substantial underestimates. For example, the outcomes shown in Table 3 demonstrate how increasing the price effect and each assumption by a third leads to estimates being more than three times larger.

**Table 3. Example of differences in outcomes**

	Price effect	Impacted Market	Duration	Impact
Lower	10%	USD 1 000	2	USD 200
Higher	15%	USD 1 500	3	USD 675

65. Overall, the impact assessments are already likely on the low side in relation to cartels due to the assumption of applying the calculations only to the cartelists' revenue. Therefore, utilising evidence based on the lowest empirical medians for cartels may be an appropriate benchmark to remain conservative. The median is also already likely to be lower than the mean as the distribution of cartel price effects is skewed, with a small number of very high price cartel effects distorting the mean upwards.

66. For mergers, an additional consideration needs to be made of the potential bias already in the empirical literature in that many of the ex-post studies focus on cases which authorities have cleared and so the sample could be biased downwards (lower price effect). This could suggest that using a measure of central tendency such as mean, or median could also already be conservative.

### 3.3. Evidence to inform cartel assumptions

67. This section considers the available evidence on price effects and duration of cartels.

#### 3.3.1. Price effect

68. The current OECD guidance recommends authorities assume a 10% price effect when calculating the effect of an intervention to stop a cartel if there is not any case specific data available. To assess the appropriateness of this metric there are a range of meta studies bringing together data from many hundreds of ex-post assessments of the level to which cartels overcharge customers.

69. A cartel overcharge is the estimated value by which a cartel has overcharged its customers compared to the situation in which the cartel had never been agreed. It is expressed in percentage terms. Calculating the level of overcharge even when estimated ex-post contains challenges and there are a range of different approaches to make the estimates. Such approaches include comparing prices before

and after the change in conduct, using difference in difference regressions and cost-based quantification approaches.

70. The most extensive database and most recently published paper on price-fixing overcharges finds cartel overcharge estimates average 121% with a median of 23% (Connor, 2024<sup>[29]</sup>).

71. This demonstrates cartels' ability to increase prices has wide variation with a large positive skew in estimates i.e. a small number of cartels which have very high overcharge estimates. Other studies are typically based on different samples of Connor's database with attempts to correct possible bias through econometric measures. These approaches often exclude the higher estimates as outliers and therefore typically have slightly lower median estimates and substantially lower mean estimates.

72. Table 4 below reports the overall median and mean estimates from the different studies.

**Table 4. Empirical estimates for typical cartel overcharge**

A sample of meta studies examining cartel overcharges

Name of paper	Sample	Overall Median	Overall Mean
Price -Fixing overcharges: revised 4 <sup>th</sup> edition, Connor (2024)	1977 cartel overcharge estimates	23%	121%
Cartel Overcharges and the Deterrent Effect of EU Competition Law, Florian Smuda (2012)	191 cartels in Europe 1770 to 2009	18%	21 %
How Much Do Cartels Overcharge? Marcel Boyer and Rachidi Kotchoni (2015)	1119 cartel overcharge estimates	16%	15 %
Cartel overcharges: an Empirical analysis, Bolotova (2009)	406 overcharge estimates	20%	22%

Sources: Connor, J. (2024<sup>[29]</sup>), "Price-Fixing Overcharges: Revised 4th Edition", Available at SSRN, <https://ssrn.com/abstract=4906907>; Boyer, M. (2015<sup>[30]</sup>), *How Much Do Cartel Overcharge? (The "Working Paper" Version)\**, [https://publications.ut-capitole.fr/id/eprint/15816/1/cartel\\_overcharges.pdf](https://publications.ut-capitole.fr/id/eprint/15816/1/cartel_overcharges.pdf); Smuda, F. (2012<sup>[31]</sup>) "Cartel Overcharges and the Deterrent Effect of EU Competition Law", *ZEW Discussion Paper*, <http://ftp.zew.de/pub/zew-docs/dp/dp12050.pdf>; Bolotova, Y. (2009<sup>[32]</sup>), "Cartel overcharges: An empirical analysis", *Journal of Economic Behavior and Organization*, Vol. 70/1-2, pp. 321-341, <https://doi.org/10.1016/j.jebo.2009.02.002>

73. This shows that the current assumption of 10% price effect appears to be 6pp lower than the lowest overall median estimates of the major meta studies examining cartel overcharges. This would appear to be conservative in that it is unlikely to overestimate the customer benefit from cartel intervention.

74. However, on the other hand some studies suggest almost 80% of cartel overcharge estimates are higher than 10%, with many substantially higher (Connor, 2024<sup>[29]</sup>). There is therefore a question whether this assumption is too conservative leading to authorities excessively underestimate the benefits of cartel enforcement. It is not surprising therefore that some authorities already utilise the 15% price level as an assumption and there is potential for the OECD guidance to be updated to reflect this.

75. Currently the OECD guidance does not provide different assumptions depending on different cartel characteristics, but cartel pricing effects do appear to be heterogenous suggesting there may be scope to consider additional categories. Some of these factors are considered in Box 3. Overall, whilst there is some evidence that there are different effects between different cartel types, the evidence does not appear consistent enough to justify having separate assumptions, the most plausible candidate would be to include higher assumptions for international cartels. However, as some studies have found the difference in effects to have converged in the most recent data, further research could be required before introducing this into the assumptions.

### Box 3. Evidence from the literature on whether there should be different price effects for different types of cartels

#### Domestic versus international cartels

The empirical evidence suggests that there may be justification for using higher assumptions for cartels which are international rather than domestic or local.

- Connor (2024) found international cartels have median overcharges of 25% compared with domestic cartels 18%. However, the difference had almost disappeared in the most recent period 2000-2019 with there being only 1pp different 20% to 21%.
- Smuda focusing on European cartels finds that domestic cartels have a lower impact than international cartels, 16.39% vs 24.71% (Smuda, 2012).
- Boyer finds that after applying econometric bias correction the medians for domestic cartels estimated to be 13.68% compared with 18.66% for international cartels (Boyer, 2015).

The rationale for this could be because international cartels are less likely to be disturbed by exports or international entry relative to local or domestic cartels. However, it is unclear if this effect continues to exist.

#### Cartel type

Another cartel characteristic explored in the cartel literature is whether bid rigging cases appear to have a greater or lesser impact on prices than other forms of price fixing agreements.

- Connor finds that bid rigging has a lower (median) price effect (19%) than classic price fixing (24%) although this effect is not consistent over each period. He finds the mean effect (relative to the 'but for' price) is higher for bid rigging than price fixing (157% vs 119%) (Connor, 2024).
- Bolotova finds that overcharges from bid rigging in all regions are no different from classic price fixing (Bolotova, 2009).
- Smuda finds negligible differences in the magnitude of mean overcharges between bid rigging and non-bid-rigging cases (Smuda, 2012).

There is mixed evidence on the extent bidding rigging cases have different price effects to price fixing cartels. Largely the evidence points to bid rigging typically having similar or slightly lower price effects and there seems to be insufficient evidence to have different assumptions for different cartel types.

#### Industry type

The evidence suggests that the industry is a relevant factor when deciding what assumption should be used. However, there is mixed evidence on different sectors. For example, some studies find services with higher impact and some find lower impact. This suggests specific assumptions for each industry might not be appropriate.

- Connor produces median overcharge rates by industry groups covering three broad groups (Primary, Manufacturing and services) as well as 30 industry groups within these. Excluding industries which have small sample sizes e.g. less than 20 overcharge estimates, the median estimates typically range from around 15% to 30% with no clear pattern. The industry which really stands out as having substantially higher price effects are pharmaceuticals with median overcharges of 164% (Connor, 2024).

- Bolotova finds that differences in market structures tend to impact the size of overcharges. Overcharges in markets producing food, natural resources, timber, equipment, and fuel are five to ten percentage points lower than overcharges imposed in markets producing chemicals. In contrast, overcharges attained in other industries and service sectors are 5 and 11.7 percentage points higher than markets producing chemicals (Bolotova, 2009).

Sources: Connor, J. (2024), "Price-Fixing Overcharges: Revised 4th Edition", Available at SSRN, <https://ssrn.com/abstract=4906907>; Smuda, F. (2012), "Cartel Overcharges and the Deterrent Effect of EU Competition Law", *ZEW Discussion Paper*, <http://ftp.zew.de/pub/zew-docs/dp/dp12050.pdf>; Boyer, M. (2015), *How Much Do Cartel Overcharge? (The "Working Paper" Version)\**, [https://publications.ut-capitole.fr/id/eprint/15816/1/cartel\\_overcharges.pdf](https://publications.ut-capitole.fr/id/eprint/15816/1/cartel_overcharges.pdf); Bolotova, Y. (2009), "Cartel overcharges: An empirical analysis", *Journal of Economic Behavior and Organization*, Vol. 70/1-2, pp. 321-341, <https://doi.org/10.1016/j.jebo.2009.02.002>.

### 3.3.2. Duration

76. The other element in the calculation is an estimate of how long the cartel would have continued absent the authorities' intervention. The current OECD guidance recommends, if case specific information is not available, using an assumption that the cartel would have endured for another three years absent the intervention.

77. To inform the duration assumption empirical evidence as to how long cartels in the past have lasted on average can be examined. Table 5 highlights some of the key estimates for cartel duration from the relevant literature on cartel duration.

**Table 5. Literature on cartel duration**

Study	Sample	Median	Mean
(Polemis, 2024)	2012-2021	5 years	6.2 years
(Levenstein and Suslow, 2011)	US/EU 1990-2011	7 years	8.1 years
(Smuda, 2012)	Cartels in Europe	5 years	8.35 years

Sources: Polemis, M. (2024<sup>[33]</sup>), "Are Cartels Forever? Global Evidence Using Quantile Regression Analysis", *MPRA*, <https://mpra.ub.uni-muenchen.de/120534/>; Levenstein, M. and V. Suslow (2011<sup>[34]</sup>), "Breaking up is hard to do: Determinants of cartel duration", *Journal of Law and Economics*, Vol. 54/2, pp. 455-492, <https://doi.org/10.1086/657660>; Smuda, F. (2012<sup>[31]</sup>) "Cartel Overcharges and the Deterrent Effect of EU Competition Law", *ZEW Discussion Paper*, <http://ftp.zew.de/pub/zew-docs/dp/dp12050.pdf>

78. These estimates are consistent with what (Harrington and Wei, 2017<sup>[35]</sup>) describe as the consensus measure of average cartel duration of discovered cartels being five to seven years.

79. There does not appear to be a strong body of empirical research assessing how cartel characteristics affect duration although there is some recent research to suggest that the distribution of cartels is bimodal, with a large number lasting less than a year and the remainder much longer lasting and that bid rigging cases and cases involving a third-party facilitator may have longer duration than classic price fixing cases (Polemis, 2024<sup>[33]</sup>).

80. There is also not a straightforward conversion from historical cartel duration to the assumption on how much longer an authority can assume a cartel should continue after an intervention for two reasons:

- Firstly, because duration estimates are looking at a sample of cases which includes cartels stopped because of intervention. In a world without interventions cartels would last longer. For example, (Connor, 2024<sup>[29]</sup>) finds that in Finland during 1950-1990, when cartels were legal, average duration was 20 years.
- Secondly at the point of detection, a cartel will already have been in existence for a period of time. There is therefore a question as to how to account for the pre-detection life of the cartel when

benchmarking against average durations of historical cartels. On the one hand, as the approach is benchmarking against the average total duration of cartels, it could be appropriate to subtract the period already accounted for. However, it may be the case that the longer a cartel has already been in existence the more likely it was stable enough to continue for a longer period.

81. The current OECD guidance recommends assuming cartels will last for three years beyond the point of intervention. Given the evidence suggesting that there may be many short-lived cartels and many which last for a very long time, this three year approach may be appropriate although consideration could be given as to whether the guidance could include lower and higher assumptions which could be utilised based on qualitative evidence on the cartels stability.

### 3.4. Evidence to inform merger assumptions

82. In assessing the impact of merger interventions, an authority must consider what would have happened in the hypothetical situation in which the merger went ahead without intervention. What is the expected change in prices and how long would this change last. This section considers the evidence available in relation to price effects and duration of mergers.

#### 3.4.1. Price effect

83. Currently the OECD guidance recommends utilising a 3% price increase assumption in the absence of merger specific information on the expected price increase. There are a range of ex-post studies estimating the price effects of mergers often focused on the US. Box 4 summarises some of these studies results.

#### Box 4. Literature on price effects from completed mergers

- Olsen, Orchinik and Remer (2024) review a sample of 64 consummated US mergers and found that the mean price effect was a 7.2% increase and that price increases are 1.65 times more likely than price decreases.
- Bhattacharya et al. (2023) find that for US retail mergers, the average consumer price effect was 1.5% but that the upper quartile corresponded to a price increase of 5.9%. They estimate that US antitrust agencies aim to propose remedies for mergers with an average expected price increase larger than about 8–9%.
- Majerovitz and Yu (2023) use an event-study approach in the consumer-packaged goods sector in the US to find an average price effect of 0.9%. However, they also estimate that the average consumer welfare decline following a merger is equivalent to a 1.9-3.7% increase in prices.
- Kwoka (2013) uses 47 studies to calculate the average impact of horizontal mergers in the United States. He finds an average post-merger price effect of approximately 6%.
- Ashenfelter and Hosken (2010) found that four of the five mergers they studied led to price effects of between 3%-7%.
- Mariuzzo, Ormosi and Havel (2016) looked at mergers in Europe and found that mergers typically only increased prices by a small amount, and such price increases happened mainly in unconditionally approved mergers. In concentrated markets, they found the average price increase is large (between 10%-20%), although the remedies managed to mitigate the effect.

Sources: Olsen, A., R. Orchinik and M. Remer (2024<sup>[36]</sup>), "Price Effects in US Merger Retrospectives: A Meta-Analytic Approach", *MIT Sloan Research Paper No. 7161-24*, <https://dx.doi.org/10.2139/ssrn.4872756>; Bhattacharya, V. et al. (2023<sup>[37]</sup>), "Merger Effects and Antitrust Enforcement: Evidence from US Retail", Available at SSRN, <https://ssrn.com/abstract=4410802>; Majerovitz, J. and A. Yu (2023<sup>[38]</sup>), "Consolidation on Aisle Five: Effects of Mergers in Consumer Packaged Goods", Available at SSRN, <https://ssrn.com/abstract=3942967>.

Kwoka, J. (2013<sup>[39]</sup>), “Does merger control work? A retrospective on US Enforcement Actions and Merger Outcomes”, *Antitrust Law Journal*, Vol. 78, 2013, Available at SSRN: <https://dx.doi.org/10.2139/ssrn.1954849>; Ashenfelter, O. and D. Hosken (2010<sup>[40]</sup>), *The Effect of Mergers on Consumer Prices: Evidence from Five Mergers on the Enforcement Margin*, *The Journal of Law & Economics*, vol. 53, no. 3, 2010, pp. 417–66. JSTOR, <https://doi.org/10.1086/605092>; Mariuzzo, F., P. Ormosi and R. Havel (2016<sup>[41]</sup>), “What can merger retrospectives tell us? An assessment of European mergers”, *CCP Working paper*, <https://ssrn.com/abstract=2781509>.

84. The limitation on relying on merger ex-post reviews is that more recent mergers will have only proceeded if a competition regime decides it is not problematic. Therefore, the estimates from academic literature are likely to be lower bound estimates.

85. An alternative approach is to conduct merger simulations. Simulation is based on constructing a formal model of competition in the market, calibrating parameters and assessing how relevant factors change with and without the intervention. Simulations have several drawbacks in that they also rely on assumptions and decisions about the appropriate model to choose. This additional complexity is unlikely to make the suitable for broad use in impact assessments given the aim for the process to be relatively resource light. However, to the extent simulations have been applied to a range of cases in the past the average results can also be informative. For example, a review of the OFT’s approach highlighted some of the typical merger simulation results (Davies, 2010<sup>[42]</sup>). It noted that the weighted average price effect of merger simulations at the DOJ at the time was around 6% and for the Portuguese authority was 5.3%. These estimated price effects are relatively consistent with the ex-post literature.

86. The studies shown in Box 4 have a wide range of estimated price effects reflecting the potential differences in samples used. The average price effect estimates appear to be around 1% to 8%. The current assumed merger price effect in the guidance of 3% would appear to be appropriately conservative compared to most of the evidence coming from the meta studies. However, there is also empirical evidence that mergers in very concentrated horizontal markets are likely to have much greater effects. Therefore, there is the potential to introduce a higher assumption where authorities have evidence that the merger would lead to particularly high concentration.

### 3.4.2. Duration

87. There is less empirical evidence to inform the extent to which any anticompetitive price effect from a merger is likely to last. A submission by the Australian Competition and Consumer Commission ACCC as part of the merger reform review in Australian found that (ACCC, 2024<sup>[43]</sup>):

*“While there is little direct empirical evidence of the speed with which markets self-correct from anti-competitive mergers, some insight can be gathered from studies that examine the duration of cartels. From an economic perspective, a cartel, by eliminating rivalry between firms, is similar to a horizontal merger. Despite price increases often in excess of 20%, around 50% of cartels last for five years, and many last a lot longer. This suggests that it can take considerable time for markets to self-correct in response to the exercise of market power.”*

88. In addition, agencies often set out in their guidance that they consider entry within two years of a merger as a factor which could lead to a potential clearance decision. For example, the Commerce Commission’s guidance in NZ sets out that:

*In general, we consider entry and expansion within two years is sufficiently timely. (NZ Commerce Commission, 2022<sup>[44]</sup>)*

89. This would suggest that the current assumption, which suggests within two years all price effects of an anticompetitive merger would have completely disappeared, can be seen as a lower bound assumption. In many cases where markets have high barriers to entry or expansion the effect would likely last for substantially longer. It may therefore be appropriate to consider whether the duration assumption for mergers could be increased.

### 3.5. Evidence to inform abuse of dominance and other case assumptions

90. While there is a reasonable amount of empirical data exploring the potential impact on prices from cartels and some literature on merger effects, there is a sparsity of reviews of abuse of dominance/unilateral cases and other non-cartel agreements. Cases of unilateral effects and other non-cartel anti-competitive practices are less common, very heterogeneous, and often less focused on price effects. Some of the reviews of non-cartel cases are highlighted in Box 5.

#### Box 5. Literature on effects of non-cartel enforcement

There appears to be less studies of the typical effect of non-cartel enforcement cases although there are some ex-post reviews for example.

#### CMA review of refusal to supply and Resale Price Maintenance (RPM) cases

The CMA explored the impact of four competition cases including a refusal to supply case, and three retail price maintenance cases (CMA, 2018). The study estimated direct price increases due to the infringement of 5% for the refusal to supply and 17% to 20% for the RPM cases. While this is only a small sample of cases, mainly focusing on one case type and geography, it provides some evidence that the price effects could be in a similar magnitude to the cartel effects.

#### EU review of remedy effectiveness of non-cartel decisions

The EU commissioned an ex-post review of the design, implementation and effectiveness of remedies imposed or accepted by the Commission in non-cartel antitrust decisions adopted during the past 20 years. The review looked in depth at a sample of 12 significant antitrust cases and assessed the implementation and effectiveness of the imposed remedies. While the study did not seek to assess quantified impact of the remedies it did highlight that less than half of the remedies assessed were deemed to be fully effective highlighting the more complex nature of abuse of dominance interventions (European Commission, 2025).

#### OECD roundtable on RPM

In 2008 the OECD held a roundtable on RPM and the potential effects were discussed in the background paper (OECD, 2008). It included an example from the UK where the Restrictive Practices Court eliminated the exemption for medicaments – a decision that had almost immediate effects on pricing. Within hours of the Court's decision, some supermarkets announced price cuts of 25 to 50 percent on leading brands of products as painkillers, cough remedies and vitamins. In addition, it gave an example from Norway in which following reforms of RPM laws in relation to books the average price of books in Norway fell by about four percent even though the consumer price index had risen by about five percent.

Sources: CMA (2018<sup>[45]</sup>), *CMA Evaluation of CA98 cases*, A DotEcon report, [https://assets.publishing.service.gov.uk/media/5b29014740f0b634b469fb2f/cma\\_ca98\\_evaluation\\_-\\_dotecon\\_report.pdf](https://assets.publishing.service.gov.uk/media/5b29014740f0b634b469fb2f/cma_ca98_evaluation_-_dotecon_report.pdf); European Commission (2025<sup>[25]</sup>), *Study 'Ex post evaluation of the implementation and effectiveness of EU antitrust remedies'*, Luxembourg: Publications Office of the European Union, 2025, [https://competition-policy.ec.europa.eu/document/download/53e9348d-4f11-46ef-9098-526e24313ee8\\_en?filename=kd0125000enn\\_ex-post\\_evaluation\\_antitrust\\_remedies\\_study\\_e-version.pdf](https://competition-policy.ec.europa.eu/document/download/53e9348d-4f11-46ef-9098-526e24313ee8_en?filename=kd0125000enn_ex-post_evaluation_antitrust_remedies_study_e-version.pdf); OECD (2008<sup>[46]</sup>), *Retail Price Maintenance - Competition Committee Series - Roundtables on Competition Policy*, No. 94, OECD Publishing, Paris., <https://doi.org/10.1787/126ecbc8-en>.

91. While it would be reasonable to expect that there would be different effects from the different types of cases discussed below, in practice even judging which are likely to have greater relative effects is challenging.

- Exploitative abuse cases in which firms exploit their dominant positions, for example through excessive pricing is perhaps the case type where there is likely to be most evidence of price effects. For example, the recent Aspen case in the EU led to price reductions of around 70% (Marinova, 2024<sup>[47]</sup>). Such cases demonstrate the potential very large negative outcomes of acquiring dominant positions through anticompetitive means. However, by their nature these cases are typically proven to have such effects ex-ante therefore for these types of abuse cases there should not be a need for an assumption.
- Exclusionary abuse cases including behaviour such as refusal to supply, predatory pricing, tying and bundling the anticipated price effects are more difficult to predict. Such behaviours are typically seeking to create or maintain a monopoly or dominant position. An intervention to stop such practice could therefore change a market from a monopoly outcome to a competitive outcome. If such outcomes were guaranteed it would be appropriate to assume an effect at least as large as that assumed for cartels. However, as highlighted by EU's review of its remedies such interventions may not always be successful. The mechanism for returning to competition is therefore more uncertain than in the case of cartels and therefore it would seem appropriate to have a lower assumption to reflect this greater uncertainty.
- Other vertical arrangements and agreements which competition authorities could find to be anticompetitive include interventions to prevent retail price maintenance or most favoured nation clause. While some of the evidence discussed in Box 5 highlights that such practices can have big price effects in a similar manner to cartels. There is less consensus on the typical effects of such behaviour and a small evidence base on which to base assumptions. Given the more limited information to continue to be conservative applying assumptions lower than cartels and in line with the current assumptions for abuse of dominance could be appropriate pending further ex post evaluation of such cases.
- Other horizontal cases, excluding hard core cartels,<sup>16</sup> such as interventions for information sharing or other forms of coordination which are not explicit agreements can potentially lead to similar effects to cartels but, as with abuse cases, there is less evidence on their typical effect and more uncertainty of outcomes. Therefore, applying an assumed price effect in line with that currently applied to abuse cases may be appropriate until further evidence is available.

92. The lack of broad studies poses difficulties for authorities in calculating the impact of such interventions. Overall, based on this review, there does not seem to be any compelling justification for changing the assumptions used for abuse of dominance which is currently set at less than half the rate of the cartel assumption for price effects. This reflects the desire to be conservative and the weaker evidence base on which the assumptions are founded. It would seem appropriate to also apply similar assumptions to other non-cartel cases, although to the extent possible authorities should seek to use case specific evidence to estimate the impact of abuse of dominance cases.

### 3.6. Category discussion

93. The current guidance for helping authorities assess the impact of their activities covers three categories, cartels, mergers and abuse of dominance. However, the guidance is silent on what to do on other cases such as anticompetitive vertical agreements or horizontal conduct which do not necessarily meet the definition of a cartel, such as information sharing and tacit collusion.

94. It would seem appropriate for the guidance to be clearer on the categories to encourage convergence and improve comparability this could include defining cartels to focus on what is known as hard core restraints. This would include bid rigging and traditional price fixing or market agreements.

95. Specific assumptions would then need to be introduced for vertical cases and non-cartel horizontal cases. These could for example be in line with the abuse of dominance assumptions to reflect the greater uncertainty and likely lower relative effect than of hardcore cartels.

# 4. Potential expansion of the guidance

96. It is important that the OECD guidance for helping authorities to assess the impact of their activities remains simple and straightforward to follow. However, there is also the potential for the guidance to be more expansive.

97. In response to the 2023 Issues note (OECD, 2023<sup>[10]</sup>) several authorities highlighted additional areas the OECD guidance might be expanded to include such as seeking to:

- extending the guidance to the evaluation of advocacy and compliance effectivity (including settlements and remedies)
- adding any specific considerations for assessing the benefits of competition interventions in digital markets
- considering longer-term effects of competition interventions, evaluating innovation and dynamic efficiencies, and understanding the potential for market dynamics to change over time
- providing further guidance on quantification methods for estimating the benefits of competition interventions
- including more comprehensive treatment of nonprice effects
- and seeking to capture broader societal benefits and quantifying externalities and spillover effects

98. This section considers firstly whether it would be appropriate to include more prescriptive guidance with regards to methodology, before exploring the different areas which could warrant inclusion if the guidance was expanded beyond its current scope.

## 4.1 Possibility of more specific guidance

99. As highlighted in section 2. there are several methodological issues and approaches agencies face in assessing their impact which are currently not covered in the OECD's guidance. Often these are areas in which there are more than one reasonable approach. There is the possibility for the guidance to give more specific advice to help encourage convergence. This could be beneficial because having international consensus on the approach could help to add credibility to the estimates. To the extent methodologies converge it could also lead to the possibilities of research being conducted on a consistent database and allowing further analysis of the competition impacts.

### 4.1.1. More worked examples

100. The current guidance is very concise and does not provide any case specific examples. There is therefore the potential for it to be expanded to include some more practical guidance and examples. For example, one of the principles of the methodology currently set out is to use case specific data where available.

101. It would seem appropriate to include a discussion of what form of case specific information might be, whether it is the results of merger simulations or actual price changes observed following the start of a cartel.

#### ***4.1.2. Discounting/Time value adjustments***

102. As the assumptions for customer benefits rely on assumptions about the future gains to customers, there is an argument that the estimates should be adjusted for the time value of money. A saving in six years' time is often viewed to be less than the value of an equivalent amount today.

103. Deciding what the appropriate discount rate is can be complicated, however in many jurisdictions governments publish central treasury discount rates for which public sector are expected to apply to areas like cost benefit analysis. One option would be to use these where available, this would seem to be more important in cases where authorities compare their estimates to their costs.

104. The guidance could be updated to discuss time value for money calculations and include reference to the possibility of using a simple assumed discount rate on all calculations.

#### ***4.1.3. Deadweight loss***

105. As highlighted in section 2. 2. theoretically it would be appropriate to include in the methodology an approach accounting for changes in demand in response to an authority's intervention changing the market price. Introducing such assumptions for elasticity of demand would be consistent with the OECD Competition Assessment Toolkit approach (OECD, 2019<sup>[48]</sup>). The toolkit suggests using an assumption of a market elasticity of -2 (or  $|\epsilon|=2$ ), in a constant elasticity demand function. It is intended to represent a typical product elasticity with moderate competition and distant but feasible alternatives.

106. While making such adjustments may provide additional comfort from a theoretical perspective. The impact of the adjustments is likely small relative to the existing uncertainty in the calculations. In addition, including such an approach adds complexity to the calculations. Given impact assessments seek to be relatively simple and straightforward assessments, introducing additional assumptions and calculations such as deadweight loss calculations may be unnecessary.

#### ***4.1.4. Appeals and overturned decisions***

107. As set out in section 3. there is a divergence in approach when it comes to the treatment of appeals. The current guidance advises authorities not to double count benefits. That is to either count the cases at the first decision or to wait and count at the time when the final appeal has occurred. It does not specify whether authorities should revise past estimates after an appeals conclusion. While either approach is justifiable, to the extent possible moving towards a consensus approach could help to lend even more credibility to the methodology and facilitate aggregation.

108. In the interest of ensuring credibility of estimates, updating the guidance to encourage convergence on the approach of revising historical estimates following any decisions being overturned would appear to be the most appropriate

#### ***4.1.5. Additional clarity on what counts as an intervention***

109. There are also other instances where it is not always clearcut as to whether an authority's actions should be included in the impact assessment. It could be helpful to revise the guidance to discuss these instances.

*Abandoned mergers*

110. Many mergers are abandoned or withdrawn prior to an official decision. Often this is because of the extent of the authorities' inquiries and the perceived likelihood that the authority may decline the merger. However, on the other hand the merger may have been abandoned for a reason independent from the authorities' actions.

111. The guidance currently is silent on this issue and authorities have different existing practices; some approach on a case-by-case basis whereas others assume that unless there is an alternative reason for the case being abandoned it was because of the authorities work.

112. The guidance could be revised to highlight that authorities should include in their impact calculations mergers which were withdrawn or abandoned if they are satisfied it was because of their investigations.

*Informal arrangements of commitments*

113. Authorities may also come up with informal agreements or commitments to change a firm's behaviour in relation to anticompetitive conduct. The guidance could be revised to highlight that authorities can include in their impact calculations a broad range of interventions and not only solutions arrived at through litigation or legislation.

**4.2. Including other interventions**

114. Currently the guidance on evaluating the impact of competition authorities is limited to enforcement activity. By not quantifying the impact of other agency work there is the risk that the benefits of competition agencies are being undervalued. This is becoming increasingly relevant as the number of agencies conducting market studies is increasing.

**4.2.1. Market studies or investigations**

115. As noted in section 2. several authorities already include estimates arising from interventions of market studies/investigations. While interventions other than competition enforcement may generate significant benefits for consumers, the nature of those initiatives is likely to vary significantly, making it hard to identify a set of reasonable common assumptions to assess the impact of these initiatives.

116. However, it could be appropriate for the guide to encourage authorities to include such estimates in their overall calculations and some indication or examples of how such benefit assumptions have been done in different cases.

**4.2.2. Advocacy**

117. Advocacy is a very important role of modern competition authorities. The role of advocacy is to improve the competitive functioning of markets by helping to encourage governments and regulators to ensuring regulations are not impacting effective competition.

118. While it is difficult to assess the extent to which a competition agencies advocacy work led to changes. the guidance could be revised to reflect possible approaches to this and include reference to the parameters and methodology in the OECD Competition Assessment Toolkit. If an authority is confident that the changes were driven by its own advocacy efforts the estimated benefits or a proportion of them from changes from rules and legislation could be included in the impact assessment of the authority.

119. Given the difficulty of assessing the extent to which the competition authority was responsible for the regulatory changes it could be appropriate to keep advocacy as a separate assessment noting the estimated total value of benefits to consumers from the changes to rules/regulations on which the competition agency advocated for.

### 4.3. Assessing the deterrence effect

120. The OECD guide does not propose an approach for capturing the effects of interventions on deterrence. Several competition authorities have commissioned work to explore the literature to quantify them; however, these effects are typically not included in their calculation of expected benefits to consumers (OECD, 2023<sup>[10]</sup>).

121. There is a risk in quantifying only the direct benefits to customers from an agency's actions that the value of competition agencies will be underestimated. This is because it excludes the potentially much larger impact of other firms being deterred from undertaking similar behaviour. In addition, to the extent the impact of market studies and forward-looking interventions have begun to be captured in impact assessments there is a risk that cases which are primarily for deterrence purposes will be relatively undervalued, and incentives created to focus on them less.

122. Therefore, while assessing direct benefits from interventions is important agencies also need to reflect the value such cases are adding to deter future bad conduct. The challenge with this is that accurately estimating the deterrent effect is very challenging.

123. Deterrence of anticompetitive conduct is commonly understood to be driven by two factors: the likelihood of the conduct being detected and the severity of the punishment.

124. Understanding the impact of one additional case on these factors is not straightforward. Individuals and business will have perceptions of the likelihood of detection and severity of a regime's punishments. One additional case, for example, against a cartel may not necessarily change these perceptions. However, long periods without such cases would and so it is the overall effect of the cases which is likely to have substantial effects. Similarly, if the severity of the punishment for the case is particularly light it might have adverse effects in leading businesses to downgrade their assumptions for cartels.

125. The next section considers the potential approaches for measuring the impact of competition authorities deterring anticompetitive conduct.

#### 4.3.1. Surveys

126. Surveys are typically conducted by asking antitrust practitioners and the businesses they advise whether conduct such as cartels or anticompetitive mergers was abandoned or changed due to fear of enforcement action.

127. Surveys have limitations as they rely on perceptions of industry figures and advisors rather than actual behaviour which could introduce bias and inaccuracy into the estimates. Table 6 lists some of the surveys of deterrence which have been undertaken in the past.

**Table 6. Survey evidence on the deterrent effect of competition enforcement**

Source	Respondent and Period	Number of mergers abandoned or modified for every merger blocked or remedied	Number of cartels deterred for every cartel detected	Number of anti-competitive agreements deterred for every anti-competitive agreement detected	Number of abuses deterred for every abuse detected
Twynstra Gudde (2005)	Competition lawyers and companies (2003) - Netherlands	7.5	-	-	-
Gordon and Squires based on Deloitte (2007)	Competition lawyers (2004-2006) – UK	5.3	5	7	4
	Large firms (2004-2006) - UK	-	16	29	10
London Economics (2011)	Large and Small firms (2003 – 2011) - UK	1.8	28	40	12
Baarsma et al. (2012)	Companies 2005 to mid-2010 - Netherlands	3.1-7.3	5	-	-

Source: Dierx et al. (2023<sup>[49]</sup>), Modelling the diffusion of the deterrent effects of competition policy, European Commission, [https://joint-research-centre.ec.europa.eu/system/files/2022-11/JRC131332\\_Modelling\\_diffusion\\_deterrent\\_effects\\_competition\\_policy.pdf](https://joint-research-centre.ec.europa.eu/system/files/2022-11/JRC131332_Modelling_diffusion_deterrent_effects_competition_policy.pdf).

128. Existing survey evidence on deterrence effect is relatively limited geographically and now many decades old. However, is indicative of the potentially large number of anticompetitive cases deterred by each authority intervention.

129. In November 2023, DG COMP commissioned a study on the extent and determinants of the deterrent effects of EU competition policy in the area of cartel and merger control as well as other antitrust enforcement. The results of this study will likely be published in 2025. Such a study could help inform European agencies to estimate deterrents going forwards and there could be the potential for future work in other regions to be done to help build assess the deterrent effect in other regions.

130. One option would be to include in the guide suggestion for agencies to conduct occasional surveys to estimate deterrent effect and then utilise the results to also calculate an estimated impact including deterrence based on conservative multiples. For example, that for enforcement cases indirect effects are likely to be at least as large as direct effects. Doing so, while clearly imprecise, could help to rebalance the perceived benefits away from forward looking cases like market studies back towards enforcement action which is currently underestimated. However, it could risk undermining the exercise if it is not viewed as being conservative. It would seem more appropriate to keep such indirect estimates separate.

#### **4.3.2. Other approaches**

131. Other approaches to estimating the deterrent effects includes using statistical inferences or theoretic modelling. Box 6 sets out some of the key literature in relation to modelling deterrence.

#### **Box 6. Literature on assessing the deterrent effect**

- Davies, Mariuzzo and Ormosi (2018) attempt to quantify the deterrent effect using a conceptual framework. They interpret cartels detected by agencies as a sample drawn from a wider population of undetected and deterred cartels. The paper highlights three types of information to quantify the effect, the probability of deterrence and detection, how the probabilities vary with

harm and the variation among the population of cartels. They come up with estimates to input into this framework by examining theoretical and empirical literature. However, they highlight a lack of knowledge on the magnitude of aggregated deterrence and leave a wide range of potential values. Based on their conservative parameters they estimate that at least 50% of harm is deterred and in the absence of cartel law the actual harm would likely be up at least 13 times higher.

- Katsoulacos, Motchenkova and Ulph (2016) also develop a similar model and find that the unmeasured Indirect Deterrence Effect is between 1.5 and 2.9 times as large as the Direct Effect depending on the various parameter value. They highlight however the result is very sensitive to the parameters used.
- For a broader summary of recent research on deterrence see also the CMA's recent literature review on the broader effects of competition policy (CMA, 2025)
- Several papers also look at periods where enforcement was reduced and attempt to assess statistically the impact of deterrence, however many of the periods assess are very old and for specific industries and so read across may be difficult.

Sources: Davies, S., F. Mariuzzo and P. Ormosi (2018<sup>[50]</sup>), "Quantifying the deterrent effect of anticartel enforcement", *Economic Inquiry*, Vol. 56/4, pp. 1933-1949, <https://doi.org/10.1111/ecin.12574>; Katsoulacos, Y., E. Motchenkova and D. Ulph (2016<sup>[51]</sup>), "Measuring the Effectiveness of Anti-Cartel Interventions: A Conceptual Framework", <http://SSRN: https://ssrn.com/abstract=2714238>; CMA (2025<sup>[52]</sup>), *Wider Benefits of Competition Policy and Enforcement*, CMA Microeconomics Unit literature review, <https://www.gov.uk/government/publications/wider-benefits-of-competition-policy-and-enforcement/wider-benefits-of-competition-policy-and-enforcement-cma-microeconomics-unit-literature-review>.

132. Overall, these approaches all do indicate that the deterrent effect of having competition regimes is many times that of the direct impact. However, given the complexity of modelling and difficulty linking back to case specific impacts the extent to which they can be incorporated into a practical methodology is likely limited to being used as supporting evidence rather than incorporated in one overall figure together with the direct price effect.

## 4.4. Assessing other effects

### 4.4.1. Innovation, quality and dynamic benefits of competition

133. Currently the OECD guidance focuses simply on the direct (static) price effects of competition interventions and simply acknowledges there are other dynamic effects but generally these are not possible to quantify.<sup>17</sup>

134. With the growth of digital markets which often do not always have prices to consumers this creates increasing difficulties for impact assessment.<sup>18</sup> We consider further the extent the methodology could be expanded to other non-price factors below.

135. Quality is a fundamental aspect of competition in many markets, however measuring quality poses many challenges not least because often quality is subjective (OECD, 2013<sup>[53]</sup>).

136. The relationship between competition and innovation is also complex. The presence of competition, encourages firms to innovate to gain an advantage over rivals by reducing costs, differentiating their products or bringing new products or services to the market (CMA, 2015<sup>[54]</sup>). However, the financial incentives for firms to innovate comes from the ability to generate future positive returns resulting from these innovations. This suggests some need for firms to be able to acquire market power because of innovations.

137. In 2023 the OECD produced a background note on the relationship between Competition and Innovation (OECD, 2023<sup>[55]</sup>). It found that:

- the effect competition has on innovation depends on whether the market is contestable, whether the innovation is appropriable, and whether there are synergies from innovating in the markets.
- innovation can also have an impact on dynamics and structure of markets and, it can create new markets entirely and disrupt existent ones.
- there are many factors that drive innovation, some of which interact with competition and some that come from other contexts where competition does not necessarily play a key role.

138. There are limited empirical studies attempting to quantify the innovation effects of specific cases, those that do have mixed results and tend to stop at counting patent outputs, rather than estimating monetary value of the innovation effect.

139. Therefore, it does not seem that including simple guidance for estimating quality, innovation or dynamic effects in the OECD guidance is possible.

#### **4.4.2. Assessing broader macroeconomic impact**

140. Another angle not covered in the OECD guidance for helping authorities assess the impact of their activities is how their interventions impact wider economic measures. With commentary increasingly discussing a potential trade-off between competition enforcement against economic growth such assessments could be increasingly important to advocate for effective competition policy going forwards.

141. (Dierx et al., 2023<sup>[49]</sup>) model deterrence as the result of the diffusion of information about the competition authority's interventions. They then extend this by using parameters to assess the impact on macroeconomic indicators. The model's parameters are calibrated using data about the activity of the European Commission. The study results suggest a 1.16 percentage point reduction in markups resulting from the Commission's competition policy interventions. This reduction triggers an increase in real GDP relative to the baseline in the range of 0.6% to 1.1%.<sup>19</sup>

142. The CMA also recently published a literature review of the wider benefits of competition policy and enforcement noting the interest in understanding effects beyond direct impact assessments (CMA, 2025<sup>[52]</sup>). The literature reviews concludes that competition enforcement and its deterrent effects increase GDP in the long run.

143. Expanding the impact assessment guidance to discuss macroeconomic modelling would move the scope beyond the simple and useful guidance for authorities to measure their direct impact and the OECD already has a separate competition and macroeconomic factsheet (OECD, 2014<sup>[56]</sup>) which is being revised to reflect the latest literature in this area. Therefore, it would not seem appropriate for the guide to expand to incorporate the assessment of broader macroeconomic effects.

# 5. Conclusions

144. Impact assessments remain a valuable tool in conjunction with other approaches to evaluations to help communicate the benefits of competition interventions and maintain accountability with stakeholders.

145. An increasing number of authorities conduct impact assessments and while their approaches mainly follow a similar approach to the 2014 OECD guide for helping authorities assess the expected impact of their activities (OECD, 2014<sub>[13]</sub>) there is a number of areas where approaches diverge.

146. The guidance document remains a practical and widely referred to document but there is an opportunity for revisions which would help to ensure it remains relevant and credible. This is justified by the age of the existing guidance, the gaps in the guidance highlighted by authorities and its increasing use by authorities. It also provides an opportunity to encourage harmonisation of approaches where appropriate.

147. There is the potential to revise the current assumptions and expand the guidance. Potential options for revisions are included below:

- No longer using the term ‘default assumptions’ to make it clearer that the assumptions are used in the absence of case specific data and not by default.
- Adding clarity on how the assumptions should be applied to different types of categories of cases. For example, the suggested cartel assumptions could be specified to include only hard core restrictions, such as price fixing, market sharing and bid rigging. The guidance could then include potentially lower price effect assumptions suggested for non-hard core cartel cases and vertical agreements.
- Revising some of the price effects assumptions to be more in line with the academic literature while remaining conservative. For example, considering increasing the hard core cartel price effect assumption to 15% and including an additional higher assumption for concentrated horizontal mergers.
- Considering revising the suggested treatment of the relevant revenue calculations to be consistent across all case types. For example, for mergers utilising only the merging parties’ relevant revenues on a conservative basis.
- Considering whether the assumed duration for merger cases should be revised upwards given most authorities would be likely to clear a merger if there was likely full successful entry within two years.
- Consider whether the guidance should propose that longer moving averages are used (e.g. five years) in the calculation lessening the risk (especially for smaller regimes) that a small number of cases distort the overall average.
- If case numbers are sufficient authorities make clear the number and types of different cases included in the calculation, the extent to which assumptions or case specific information was available and what assumptions were used.

148. There is also the potential to expand the guidance and additions could include:

- More worked examples to demonstrate how the calculations can be done in practice.
- A steer to include adjustments based on the time in which benefits to consumers fall (discounting).

- An agreed approach to the treatment of appealed cases, treatment of cases which were closed by commitments and withdrawn mergers.
- A discussion of assessing the impact of market studies and advocacy work.
- A discussion of deterrence and the possibility for agencies to carry out work exploring deterrence through surveys for example.

# Endnotes

<sup>1</sup> Based on 20 jurisdictions for which the OECD found published estimates of impact, annualised and converted to USD using the average annual exchange rate for 2023. Jurisdiction covered include Belgium, Brazil, Canada, European Union, Estonia, France, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Latvia, Mexico, Netherlands, Romania, Spain, Türkiye, United Kingdom, United States.

Calculation based on the most recent year available or if only published for longer periods an annual rate calculated by dividing by the number of years. No adjustments were made for time value of money. Where ranges were published the central estimate, or a mid-point were used. To the extent possible consumer protection figures were excluded, in a few jurisdictions' separate competition impacts were not published and results include other cases such as misleading marketing in these instances it was assumed 50% of the calculated impact was from competition cases.

<sup>2</sup> More specific guidance on communicating with stakeholders can be found in a series of guidance documents published the international Competition Network which seek to address the challenges many competition authorities face in explaining the benefits of competition to key stakeholders (ICN, 2017<sup>[4]</sup>; 2017<sup>[85]</sup>; 2017<sup>[83]</sup>).

<sup>3</sup> Annex A includes a non-exhaustive list of authorities where the results from impact assessments have been published in recent years.

<sup>4</sup> For example, the Belgian competition authority in their 2023 annual report calculated the impact by using the EU approach and the OECD approach as a sensitivity test (Belgian Competition Authority, 2023<sup>[57]</sup>).

<sup>5</sup> For example, when case specific data is unavailable in relation to the assumption used for cartel price effects:

- the Mexican Federal Competition Commission (*Cofece*) has used a 15% assumed price effect but notes that it calculates the impact for one year (OECD, 2023<sup>[14]</sup>).
- The UK CMA also uses a 15% assumption for cartel price effects. This was implemented by the CMA's predecessor the Office of Fair Trading (OFT) following a review of the OFT's Impact Estimation Methods by Professor Stephen Davies. This report suggested that "relative to the wider existing cartel literature, the price-raising 10 per cent default is over-conservative, and that 15 per cent might be more appropriate, but still conservative" (Davies, 2010<sup>[42]</sup>).

<sup>6</sup> For example, the US DOJ assumes cartels would only last for one year absent the intervention as set out in the 2013 Assessment of the Impact of Competition authorities' Activities (OECD, 2013<sup>[15]</sup>) and the UK CMA assumes a six year duration (OFT, 2010<sup>[81]</sup>).

<sup>7</sup> For example, DG Comp stated their approach to cartel duration is as follows (OECD, 2023<sup>[21]</sup>): "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. 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.

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).<sup>7</sup>

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.

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. 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. 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"

<sup>8</sup> For Example, Belgium (Belgian Competition Authority, 2023<sub>[57]</sub>), the EU (OECD, 2023<sub>[21]</sub>), Iceland (Icelandic Competition Authority, 2024<sub>[27]</sub>), Ireland (CCPC, 2022<sub>[24]</sub>).

<sup>9</sup> For example, Netherlands (ACM, 2014<sub>[22]</sub>) and France (OECD, 2023<sub>[18]</sub>) assume a merger effect would last 3 years whereas the US (OECD, 2023<sub>[6]</sub>; 2014<sub>[13]</sub>) and Mexico calculate the effect only for one year (OECD, 2023<sub>[14]</sub>).

<sup>10</sup> DG Comp and countries such as Belgium who have applied a similar methodology (Belgian Competition Authority, 2023<sub>[57]</sub>). DG Comp state that (OECD, 2023<sub>[21]</sub>):

'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].

- 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>11</sup> For example Belgium (Belgian Competition Authority, 2023<sup>[57]</sup>), Brazil (OECD, 2023<sup>[59]</sup>), EU, Iceland (Icelandic Competition Authority, 2024<sup>[27]</sup>), Ireland (CCPC, 2022<sup>[24]</sup>), Romania (OECD, 2023<sup>[75]</sup>).

<sup>12</sup> For example:

- the CMA stated that the CMA impact assessment estimates include benefits from cases where the outcome is under appeal at the time of publication of the report. The CMA include these benefits as it considers this ensures the impact assessment is the best estimate of the likely impact of CMA cases at the time of the publication of the report. In addition, this approach also ensures that the benefit estimates are included in the impact assessment at roughly the same time as the costs the CMA incurred in carrying out the case.
- DG Comp stated that 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 (OECD, 2023<sup>[21]</sup>).

<sup>13</sup> For example:

Many authorities including the Irish, Spanish CNMC, and Latvian CC have included second phase mergers unless there is evidence of a reason that they were withdrawn other than for competition concerns (CCPC, 2022<sup>[24]</sup>) (Sales, Cruz and Ugarte, 2023<sup>[26]</sup>).

The Dutch ACM included 70% of the impact if withdrawals were made in phase one and 100% if withdrawn in phase 2 (ACM, 2014<sup>[22]</sup>).

Singapore's CCCS covers all withdrawn mergers if it was withdrawn after concerns were raised by the CCCS (OECD, 2023<sup>[77]</sup>).

<sup>14</sup> For example, the UK and Italian authorities both publishes results annually on a 3-year moving average basis.

<sup>15</sup> To keep the exercise simple such assessments typically do not seek to calculate the effect on end consumers by calculating potential pass-through. For example, in the case of input cartels or intermediary products the calculations would be assessing the impact on the directly affected parties.

<sup>16</sup> A “hard core cartel” is an anticompetitive agreement, anticompetitive concerted practice, or anticompetitive arrangement by competitors to fix prices, make rigged bids (collusive tenders), establish output restrictions or quotas, or share or divide markets by allocating customers, suppliers, territories, or lines of commerce; (OECD recommendation concerning Effective Action against Hard Core Cartels).

<sup>17</sup> However, there is the potential for the methodology to also capture some non-price effects for example by assuming a default price effect in cases which are focused on quality or innovation effects.

<sup>18</sup>The Dutch Authority in its 2023 annual report noted that (ACM, 2023<sup>[72]</sup>):

*Making a reliable estimate has become harder and harder. Many new developments fall outside the current calculation method. The calculation is no longer representative of the actual impact of ACM's oversight. As such, the outcome loses meaning.*

The ACM particularly referred to unwanted behaviour in the digital domain in consumer cases but many of the same challenges arise in digital competition cases.

<sup>19</sup> See also 'Protecting competition in a changing world, Evidence on the evolution of competition in the EU during the past 25 years' Part II (European Commission DG COMP, 2024<sup>[88]</sup>) for a further discussion of the relationship between competition and other macroeconomic variables such as growth and productivity in the EU.

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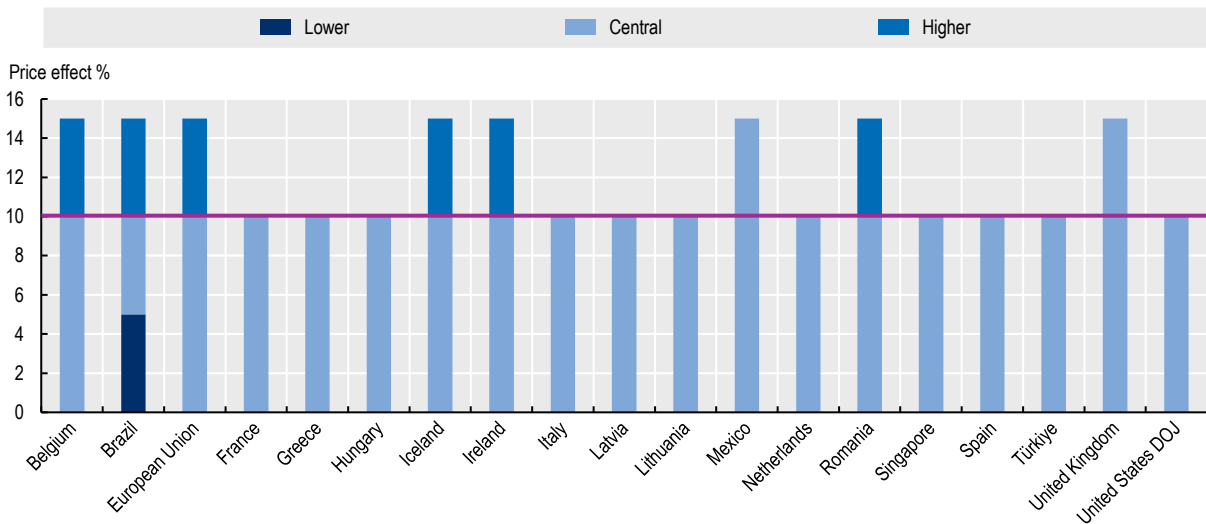
# Annex A. Current assumptions used by authorities

This annex sets out the current assumptions of each authority based on a review of submissions to the 2023 WP2 roundtable on assessing and communicating consumer benefit as well as a review of authority websites. It is not an exhaustive list but indicative of past authority practice.

## Cartels

Figure A A.1. Assumptions used by authorities for cartel price effect

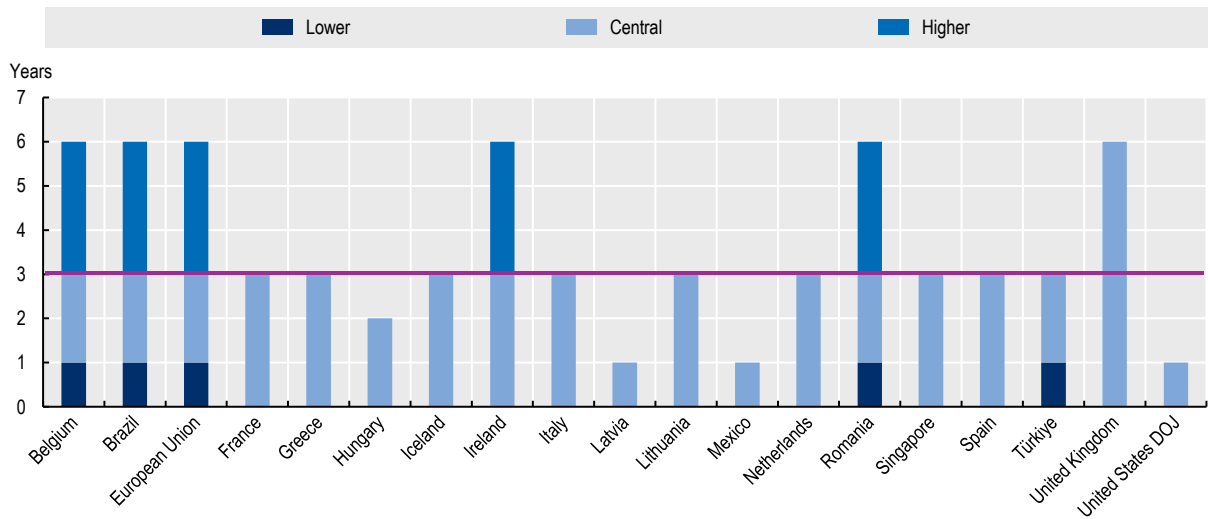
The assumptions authorities use if case specific data is not available for the price effect of stopping a cartel.



Notes: Purple line is the current OECD guidance level. Lower and higher estimates included where authorities use ranges or sensitivity tests. Source: June 2023 WP2 contributions to session on Assessment and communication of benefits of competition interventions and Authority annual reports.

**Figure A A.2. Assumptions used by authorities for cartel duration**

The assumptions authorities use if case specific data is not available for the expected duration of a cartel.

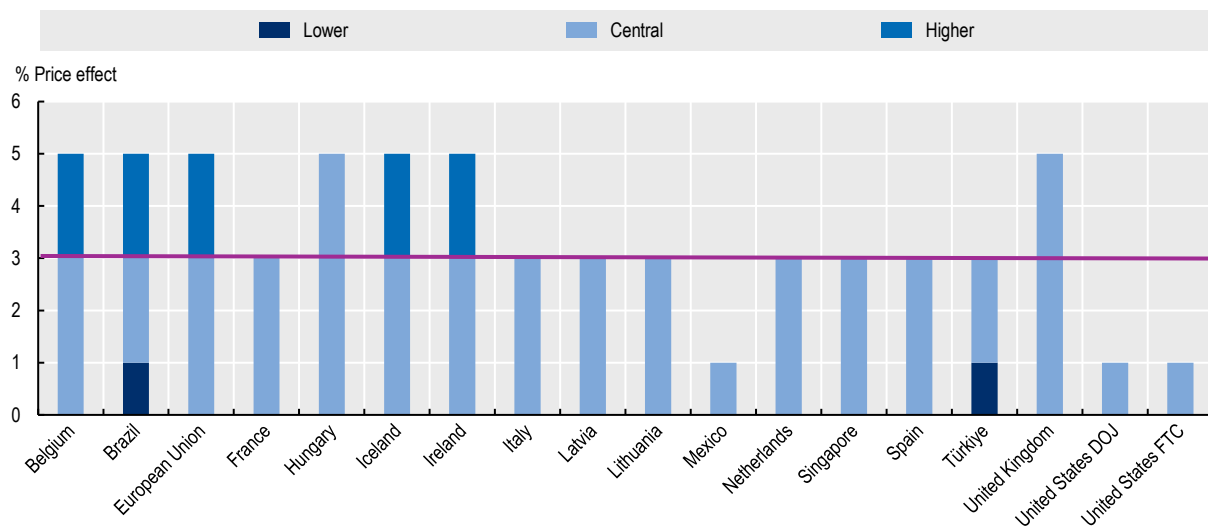


Note: Purple line is the current OECD guidance level. Lower and higher estimates included where authorities use ranges or sensitivity tests.  
 Source: June 2023 WP2 contributions to session on Assessment and communication of benefits of competition interventions and Authority annual reports.

## Mergers

**Figure A A.3. Assumptions used by Authorities for merger price effect**

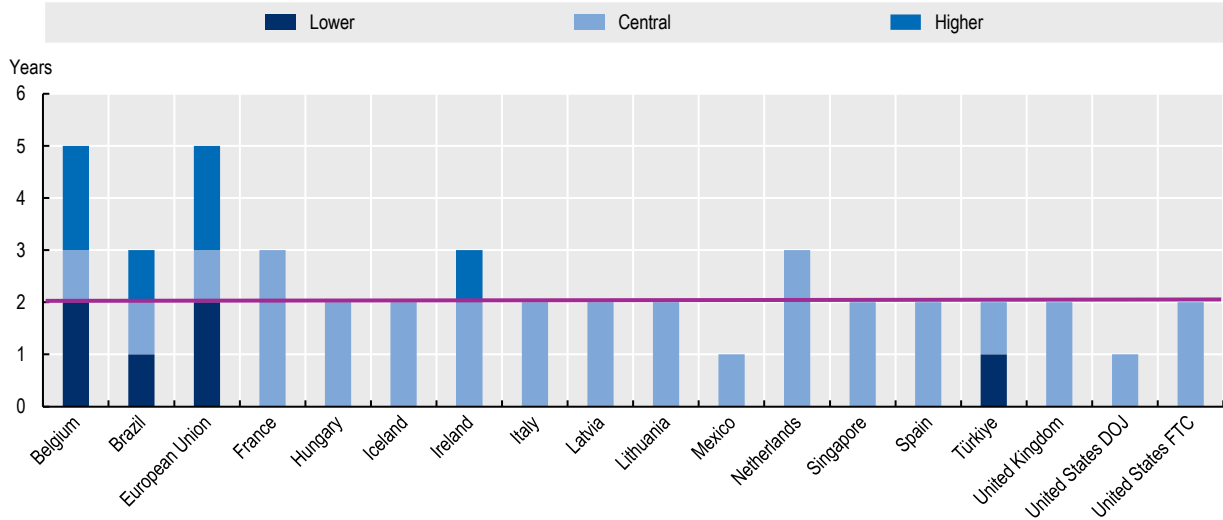
The assumptions authorities use if case specific data is unavailable when estimating the anticipated price effect from preventing an anticompetitive merger.



Notes: Purple line is the current OECD guidance level. Lower and higher estimates included where authorities use ranges or sensitivity tests.  
 Source: June 2023 WP2 contributions to session on Assessment and communication of benefits of competition interventions and Authority annual reports.

**Figure A A.4. Assumptions used by Authorities for the duration of Merger effect**

The assumptions authorities use if case specific data is unavailable when estimating the number of years an anticompetitive merger would have lasted if it were not for the intervention.

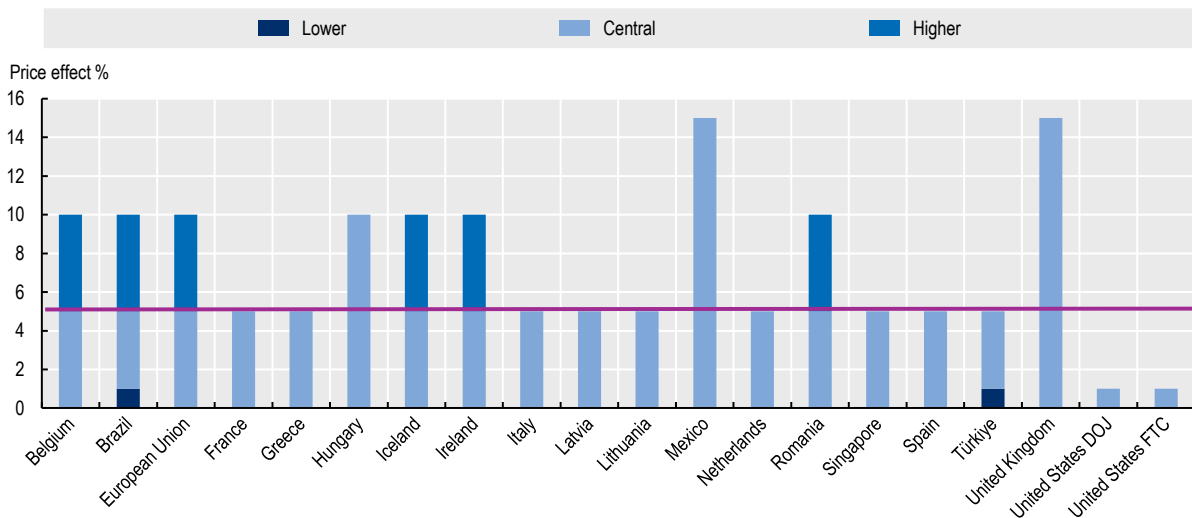


Notes: Purple line is the current OECD guidance level. Lower and higher estimates included where authorities use ranges or sensitivity tests. Source: June 2023 WP2 contributions to session on Assessment and communication of benefits of competition interventions and Authority annual reports.

### Abuse of dominance

**Figure A A.5. Assumptions used by Authorities for Abuse of dominance price effect**

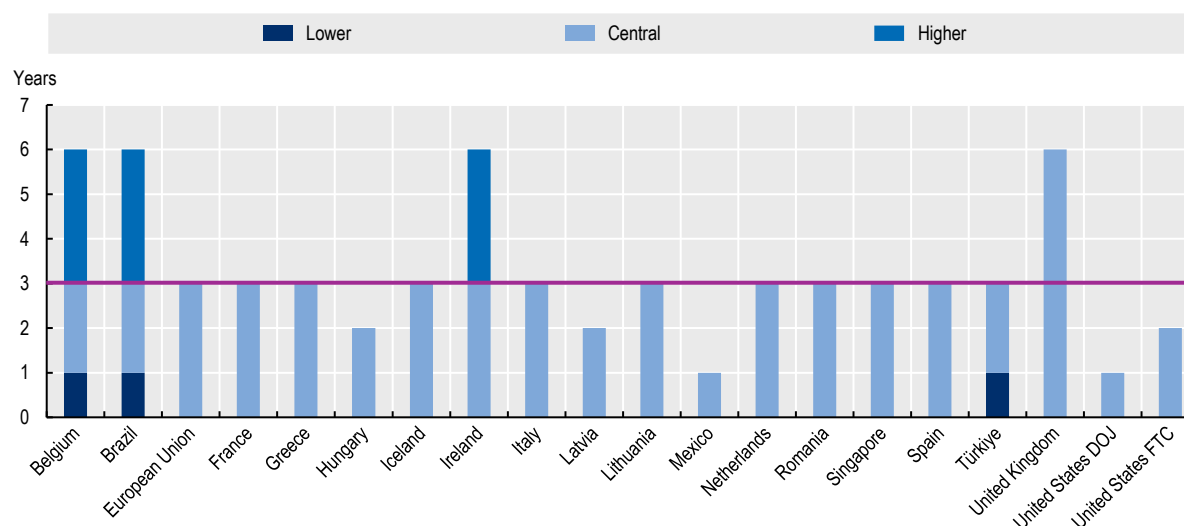
The assumptions authorities use if case specific data is unavailable when estimating the price effect of an abuse of dominance.



Note: Purple line is the current OECD guidance level. Lower and higher estimates included where authorities use ranges or sensitivity tests. Source: June 2023 WP2 contributions to session on Assessment and communication of benefits of competition interventions and Authority annual reports.

### Figure A A.6. Assumptions used by Authorities for Abuse of dominance duration

The assumptions authorities use if case specific data is unavailable when estimating the duration of an abuse of dominance.



Note: Purple line is the current OECD guidance level. Lower and higher estimates included where authorities use ranges or sensitivity tests.  
Source: June 2023 WP2 contributions to session on Assessment and communication of benefits of competition interventions and Authority annual reports.

Table A.1 includes a non-exhaustive list of sources to published estimates and methodologies (where available) found by the OECD for competition authorities' impact assessments.

### Table A.1. References of competition authority impact assessment results and methodologies

Jurisdiction	References
Belgium	Belgian Competition Authority Annual report 2023. (Belgian Competition Authority, 2023 <sup>[57]</sup> ) <a href="http://www.belgiancompetition.be/en/about-us/publications/annual-report-2023-bca">www.belgiancompetition.be/en/about-us/publications/annual-report-2023-bca</a> (report in French) Includes customer benefit estimates and methodology used – pg35
Brazil	Expected benefits of CADE's performance in 2023 customer benefit estimates and assumptions used. (CADE, 2023 <sup>[58]</sup> ) <a href="http://www.gov.br/cade/en/matters/news/study-shows-cade2019s-performance-in-2023">www.gov.br/cade/en/matters/news/study-shows-cade2019s-performance-in-2023</a> (Summary in English, full report in Portuguese) Assessing and Communicating the Benefits of Competition Interventions – Note by Brazil (OECD, 2023 <sup>[59]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)18/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)18/en/pdf</a>
Canada	Dollar value estimated of annual consumer savings from Bureau actions that stop anti-competitive and deceptive marketing activity, 2023-2024 (Government of Canada, 2024 <sup>[60]</sup> ) <a href="http://www.tbs-sct.canada.ca/ems-sgd/edb-bdd/index-eng.html#infographic/program/ISC-BNP12/results">www.tbs-sct.canada.ca/ems-sgd/edb-bdd/index-eng.html#infographic/program/ISC-BNP12/results</a>
European Union	Annual Activity Report 2023, DG COMP (European Commission, 2023 <sup>[61]</sup> ) <a href="https://commission.europa.eu/document/download/9a474274-a65b-4365-b318-7d683fd6747e_en?filename=AAR-2023-DG%20COMP.pdf">https://commission.europa.eu/document/download/9a474274-a65b-4365-b318-7d683fd6747e_en?filename=AAR-2023-DG%20COMP.pdf</a> Competition Policy Brief - Customer savings generated by the Commission's antitrust and merger enforcement: a 10-year perspective. (European Commission, 2022 <sup>[11]</sup> ) <a href="https://competition-policy.ec.europa.eu/system/files/2022-10/kdak22001enn_competition_policy_brief_0.pdf">https://competition-policy.ec.europa.eu/system/files/2022-10/kdak22001enn_competition_policy_brief_0.pdf</a> Assessing and Communicating the Benefits of Competition Interventions – Note by the European Union, (OECD, 2023 <sup>[21]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)16/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)16/en/pdf</a>
Estonia	Annual Report on Competition Policy Developments in Estonia 2023, (Estonian Competition Authority, 2023 <sup>[62]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/AR(2024)10/en/pdf?sessionId=1738600582083">https://one.oecd.org/document/DAF/COMP/AR(2024)10/en/pdf?sessionId=1738600582083</a>
France	2023 Annual Report, (Autorité de la concurrence, 2023 <sup>[63]</sup> ) <a href="http://www.autoritedelaconcurrence.fr/sites/default/files/2024-09/240903_ADLC_UK_RA2023_planche_BAT-15M.pdf">www.autoritedelaconcurrence.fr/sites/default/files/2024-09/240903_ADLC_UK_RA2023_planche_BAT-15M.pdf</a>

	Assessing and Communicating the Benefits of Competition Interventions – Note by France (OECD, 2023 <sup>[18]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)2/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)2/en/pdf</a>
Greece	The Competition Commission's 2023 activity report (Hellenic Competition Commission, 2023 <sup>[64]</sup> ) <a href="http://www.epant.gr/enimerosi/dimosieyseis/ektheseis-pepragmenon/item/2913-ekthesi-pepragmenon-tou-2023.html">www.epant.gr/enimerosi/dimosieyseis/ektheseis-pepragmenon/item/2913-ekthesi-pepragmenon-tou-2023.html</a> (report in Greek) Assessing and Communicating the Benefits of Competition Interventions – Note by Greece (OECD, 2023 <sup>[65]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)3/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)3/en/pdf</a>
Hungary	Quantifying welfare gains achieved by the GVH (ex-ante impact assessment), (Hungarian Competition Authority, 2023 <sup>[16]</sup> ), <a href="http://www.gvh.hu/en/gvh/analyses/ex_ante_impact_assessment/quantifying_welfare_gains_achieved_by_the_gvh_ex_a">www.gvh.hu/en/gvh/analyses/ex_ante_impact_assessment/quantifying_welfare_gains_achieved_by_the_gvh_ex_a</a> Assessing and Communicating the Benefits of Competition Interventions – Note by Hungary (OECD, 2023 <sup>[66]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)4/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)4/en/pdf</a>
Iceland	The Icelandic Competition Authority, calculated benefits of the Authority's intervention 2014-2023, (Icelandic Competition Authority, 2024 <sup>[67]</sup> ), <a href="http://www.samkeppni.is/urlausnir/skyrslur/nr/4617">www.samkeppni.is/urlausnir/skyrslur/nr/4617</a> (report in Icelandic) Calculated benefit from the Competition Authority's intervention, description of methodology and assumptions (Icelandic Competition Authority, 2024 <sup>[27]</sup> ) <a href="http://www.samkeppni.is/urlausnir/skyrslur/nr/4616">www.samkeppni.is/urlausnir/skyrslur/nr/4616</a> (report in Icelandic)
Ireland	CCPC Impact Assessment Estimating the Consumer Benefits of the CCPC's Competition Enforcement and Merger Control, (CCPC, 2022 <sup>[24]</sup> ) 2017-2020 <a href="http://www.ccpc.ie/business/wp-content/uploads/sites/3/2022/06/2022.06.02-CCPC-Competition-Impact-Assessment.pdf">www.ccpc.ie/business/wp-content/uploads/sites/3/2022/06/2022.06.02-CCPC-Competition-Impact-Assessment.pdf</a>
Italy	Assessing and Communicating the Benefits of Competition Interventions – Note by Italy (OECD, 2023 <sup>[23]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)6/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)6/en/pdf</a> 2024 Annual report, (AGCM, 2022 <sup>[68]</sup> ), <a href="http://www.agcm.it/dotcmsdoc/relazioni-annuali/relazioneannuale2023/AGCM_Relazione_annuale_2024.pdf">www.agcm.it/dotcmsdoc/relazioni-annuali/relazioneannuale2023/AGCM_Relazione_annuale_2024.pdf</a> (report in Italian)
Latvia	The work of the Competition Council generates a social benefit of 51.2 million euros per year (Competition Council of Latvia, 2023 <sup>[69]</sup> ) <a href="http://www.kp.gov.lv/lv/jaunums/konkurences-padomes-darbs-rada-sabiedribas-iegvumu-512-milj-eiro-gada">www.kp.gov.lv/lv/jaunums/konkurences-padomes-darbs-rada-sabiedribas-iegvumu-512-milj-eiro-gada</a> (press release in Latvian) Methodology for quantifying the benefits of society from the implementation of competition policy, (Competition Council of Latvia, 2023 <sup>[5]</sup> ) <a href="http://www.kp.gov.lv/sites/kp/files/media_file/2023_si_metodika.pdf">www.kp.gov.lv/sites/kp/files/media_file/2023_si_metodika.pdf</a> (report in Latvian) Assessing and Communicating the Benefits of Competition Interventions – Note by Latvia (OECD, 2023 <sup>[19]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)7/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)7/en/pdf</a>
Lithuania	Performance evaluation: benefits for consumers (Competition Council of the Republic of Lithuania, 2023 <sup>[70]</sup> ) <a href="http://www.kt.gov.lt/lt/administracine-informacija/veiklos-vertinimas">www.kt.gov.lt/lt/administracine-informacija/veiklos-vertinimas</a> (reports in Lithuanian) Assessing and Communicating the Benefits of Competition Interventions – Note by Lithuania (OECD, 2023 <sup>[20]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)8/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)8/en/pdf</a>
Mexico	Assessing and Communicating the Benefits of Competition Interventions – Note by Mexico (OECD, 2023 <sup>[14]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)9/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)9/en/pdf</a> Economic benefits of Cofece's 2023 interventions. (COFECE, 2022 <sup>[71]</sup> ) <a href="http://www.cofece.mx/beneficio-economico-de-las-intervenciones-de-la-cofece-2023/?lang=en">www.cofece.mx/beneficio-economico-de-las-intervenciones-de-la-cofece-2023/?lang=en</a> (report in Spanish)
Netherlands	2023 ACM Annual Report (discusses stopping calculations) (ACM, 2023 <sup>[72]</sup> ) <a href="http://www.acm.nl/system/files/documents/acm-annual-report-2023.pdf">www.acm.nl/system/files/documents/acm-annual-report-2023.pdf</a> Changes in the ACM outcome methodology, June 2022 (ACM, 2021 <sup>[73]</sup> ) <a href="http://www.acm.nl/system/files/documents/acm-2021-adjustments-outcome-methodology-english-translation.pdf">www.acm.nl/system/files/documents/acm-2021-adjustments-outcome-methodology-english-translation.pdf</a> 2021 ACM Annual Report (ACM, 2021 <sup>[74]</sup> ) <a href="http://www.acm.nl/sites/default/files/documents/2021-acm-annual-report_0.pdf">www.acm.nl/sites/default/files/documents/2021-acm-annual-report_0.pdf</a> Outcomes ACM, 2013 (ACM, 2014 <sup>[22]</sup> ) (previous methodology) <a href="http://www.acm.nl/nl/publicaties/publicatie/12714/Outcome-ACM-2013">www.acm.nl/nl/publicaties/publicatie/12714/Outcome-ACM-2013</a>
Romania	Assessing and Communicating the Benefits of Competition Interventions – Note by Romania (OECD, 2023 <sup>[75]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)21/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)21/en/pdf</a> Annual report 2023 (Competition Council Romania, 2023 <sup>[76]</sup> ) <a href="http://www.consiliulconcurentei.ro/wp-content/uploads/2024/08/Raport-anual-2023.pdf">www.consiliulconcurentei.ro/wp-content/uploads/2024/08/Raport-anual-2023.pdf</a> (report in Romanian)
Singapore	Assessing and Communicating the Benefits of Competition Interventions – Note by Singapore (OECD, 2023 <sup>[77]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)24/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)24/en/pdf</a>
Spain	Assessing and Communicating the Benefits of Competition Interventions – Note by Spain (OECD, 2023 <sup>[78]</sup> ) <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)13/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)13/en/pdf</a> Impact of the CNMC's antitrust interventions: methodology and estimates for the period 2012-2022 (Sales, Cruz and Ugarte, 2023 <sup>[26]</sup> ) <a href="https://doi.org/10.32796/ice.2023.931.7608">https://doi.org/10.32796/ice.2023.931.7608</a> (report in Spanish)

Republic of Türkiye	<p><a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)14/en/pdf_(OECD,2023)17">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)14/en/pdf_(OECD, 2023<sup>[17]</sup>)</a>  The Turkish Competition Authority Impact Analysis Report 2023-2024. (Turkish Competition Authority, 2023<sup>[79]</sup>)  <a href="http://www.rekabet.gov.tr/Dosya/etki-analizi-raporu-2023-2024_web.pdf">www.rekabet.gov.tr/Dosya/etki-analizi-raporu-2023-2024_web.pdf</a> (report in Turkish)</p>
United Kingdom	<p>Impact Assessment 2023 to 2024 (CMA, 2024<sup>[7]</sup>)  <a href="http://www.gov.uk/government/publications/cma-impact-assessment-2023-to-2024/impact-assessment-2023-to-2024">http://www.gov.uk/government/publications/cma-impact-assessment-2023-to-2024/impact-assessment-2023-to-2024</a>  Assessing and Communicating the Benefits of Competition Interventions – Note by the United Kingdom (OECD, 2023<sup>[80]</sup>)  <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)25/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)25/en/pdf</a>  A guide to OFT's impact estimation methods (July 2010) (OFT, 2010<sup>[81]</sup>)  <a href="https://webarchive.nationalarchives.gov.uk/ukgwa/20140402142426/http://www.of.gov.uk/OFTwork/publications/publication-categories/reports/Evaluating/of1250">https://webarchive.nationalarchives.gov.uk/ukgwa/20140402142426/http://www.of.gov.uk/OFTwork/publications/publication-categories/reports/Evaluating/of1250</a></p>
United States	<p>Assessing and Communicating the Benefits of Competition Interventions – Note by the United States (OECD, 2023<sup>[6]</sup>)  <a href="https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)15/en/pdf">https://one.oecd.org/document/DAF/COMP/WP2/WD(2023)15/en/pdf</a>  Federal Trade Commission Annual Performance Report for Fiscal Year 2021 and Annual Performance Plan for Fiscal Years 2022 to 2023 US (FTC, 2021<sup>[82]</sup>)  <a href="http://www.ftc.gov/system/files/ftc_gov/pdf/21apr_22-23app.pdf">www.ftc.gov/system/files/ftc_gov/pdf/21apr_22-23app.pdf</a>  See Guide for Helping Competition Authorities Assess the Expected Impact of their Activities (Apr. 2014),  <a href="http://www.oecd.org/daf/competition/Guide-competition-impact-assessmentEN.pdf">www.oecd.org/daf/competition/Guide-competition-impact-assessmentEN.pdf</a> (OECD, 2014<sup>[13]</sup>) Annex 1 detailing assumptions used in cartel cases, merger cases, and abuse of dominance/monopolization cases)</p>