Organisation for Economic Co-operation and Development

DAF/COMP(2022)6

Unclassified **English - Or. English**

11 April 2022

DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE

Roundtable on Disentangling Consummated Mergers: Experiences and Challenges – Background Note

By the Secretariat

23 June 2022

This document was prepared by the OECD Secretariat to serve as a background note for Item 6 of 138th OECD Competition Committee on 21-23 June 2022.
The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

More documentation related to this discussion can be found at:
https://www.oecd.org/daf/competition/disentangling-consummated-mergers-experiences-and-challenges.htm

Please contact Mr Antonio Capobianco if you have questions about this document.
[Email: Antonio.CAPOBIANCO@oecd.org].

JT03493219

Disentangling Consummated Mergers Experiences and Challenges

Background note by the Secretariat*

One of the areas of divergence in merger control regimes around the world is the ability of competition authorities to review and remedy the anti-competitive effects of consummated mergers. Only few jurisdictions, beyond those with a voluntary notification system, which allows parties to close a transaction without prior clearance from the competition authority, have the power to review consummated mergers and to impose remedies if such mergers would result in a significant lessening of competition.

This paper reviews the policy considerations arising in relation to designing effective remedies for consummated mergers with an anti-competitive effect. It focuses primarily on the remedial actions available to competition authorities when they have the power to review mergers ex post regardless of whether they have already reviewed and approved them ex ante, or fell below notification thresholds (i.e. they were not notified), and that later resulted in anti-competitive effects once consummated.

It concludes that although the powers to review consummated mergers remain limited, more jurisdictions are considering adopting them. While such powers allow to fill the enforcement gap and allow the review of non-notifiable consummated mergers, important considerations should guide the authorities' use of such powers. These include the effects that ex post merger investigations may have on the incentives to merge, especially if they are applicable also to notified mergers; the availability of proportionate and effective remedies, given the status of integration of the parties' assets; the costs of disentangling the consummated merger and its benefits.

The paper discusses in depth the feasibility of imposing structural remedies in an ex post context, drawing from experiences in other areas including self-initiated private break-ups, break-ups and structural remedies in non-merger cases, and experiences with break-ups and structural separation in regulated industries. It concludes that divestitures remain the preferable remedial option also in an ex post context, but that competition authorities should also consider adopting behavioural / conduct remedies, whose limitations appear to be less significant when designed in an ex post context.

* This paper was prepared by Antonio Capobianco and Aura García Pabón (OECD Competition Division). The paper benefited from comments by Ori Schwartz, Sabine Zigelski and Paulo Burnier from the Competition Division. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

Table of contents

Boxes

1. Introduction

1. In 2014, when the OECD Competition Committee discussed for the last time the powers and the experiences of jurisdictions to review consummated mergers (OECD, 2014[1]), it found that only a few jurisdictions had such powers and, when these powers existed, that they were rarely enforced, with the notable exception of the United States. A number of recent developments have re-opened the debate on whether competition authorities should be granted powers to revisit the effects of past mergers and adopt remedial actions in case those mergers have led to anti-competitive effects in the market post-consummation, as well as what are the circumstances in which the use of these powers is recommended.

2. **First**, a number of studies have pointed towards a growing market concentration[1] and increasing market power in a number of industries, such as aviation, banking and in digital markets (OECD, 2018, p. 18[2]). Evidence of increased industry or sector concentration was accompanied by evidence of increasing mark-ups and profits, raising concerns that markets around the world were becoming less competitive (Koltay, Lorincz and Valletti, 2021[3]). Among the reasons put forward for such concerning trends there was a lax approach to competition enforcement which has allowed firms to build, protect and extend positions of market power through anti-competitive mergers, conduct or agreements. In this debate, proposals to expand the scope for *ex post* merger reviews would allow to de-concentrate markets and dilute market power.

3. **Second**, it has become apparent in a number of sectors, especially in the digital and pharma sectors, that some transactions are not reportable for review by competition authorities under the traditional merger control systems. These transactions escape scrutiny because of the jurisdictional triggers for merger review which are usually based on the turnover of the firms involved, allowing acquisitions of firms which do not generate yet any turnover to go unchecked.[2] This perceived enforcement gap was discussed particularly with regard to the so-called "killer acquisitions" of nascent firms (OECD, 2020[4]), where the rationale of the transaction is for buyer to acquire nascent competitors only to discontinue the target's innovation projects, thereby pre-empting the emergence of future competition. Again, in this context, a number of proposals for *ex post* merger review powers were put forward to allow authorities to address this gap by scrutinising these types of transactions, which were not notifiable but nevertheless resulted in a restriction of potential competition.

4. **Third**, *ex post* evaluations of individual merger decisions and retrospective merger studies by a number of academics flagged concerns of a generalised regulatory tolerance vis-à-vis mergers [(OECD, 2016[5]) and (OECD, 2011[6])]. These studies pointed at an excessively high rate of clearance decisions[3], which, combined with low rates of success of remedy packages in conditional clearances and with an increasing reliance (to the point of over-reliance) on behavioural/conduct remedies, led some commentators to argue that competition authorities have failed to effectively enforce their merger control powers to preserve competitive market structures.[4] In this context, *ex post* merger review powers would help correcting this perceived failure and re-establish more competitive market structures.

5. Against this background, the question has arisen of whether the limitations of *ex ante* merger review systems should be addressed with wider *ex post* review powers, allowing authorities to remedy competition problems, which were not foreseeable or could not be addressed *ex ante* because of lack of jurisdictional powers.

6. This paper builds on the Secretariat Background Paper on Investigations of consummated and non-notifiable mergers (OECD, 2014[1]). The focus of this paper,

however, will be more specifically on disentangling a consummated merger, i.e. on the most effective remedial actions that authorities can put in place should they have jurisdiction over consummated mergers. The analysis will focus on *ex post* review of mergers, which fell below notification thresholds, and therefore were not reviewed by the competition authority, but resulted in anti-competitive effects; and on *ex post* review of mergers which were reviewed and approved by a competition authority but later resulted in anti-competitive effects.

7. While relevant for this topic, the paper will not include detailed discussions on the remedial actions that authorities have adopted in case of traditional gun jumping cases or of violations of the standstill obligation / suspensory effect clause in merger review. These issues were extensively discussed in the 2018 Roundtable on Gun Jumping (OECD, 2018[7]).[5] Similarly, the paper will not review the traditional enforcement actions that authorities can take when they become aware that in the merger notification form or during the review process the parties have provided false or misleading information to the authority, based on which the pre-closing assessment understated the competitive harm or overstated the market benefits resulting from the merger.[6]

8. Although this paper will focus mainly on remedies for consummated mergers,[7] measures that competition authorities can impose when past merger remedies were not effective or were insufficient in restoring effective competition will not be discussed.[8] Equally, this paper is not meant to review the extensive literature and studies on *ex post* merger studies, i.e. mergers retrospectives that competition authorities or academics[9] have done on specific merger decisions or on types of merger measures adopted in the past to assess *ex post* their effectiveness and inform future enforcement practices (e.g. most effective remedies, theories of harm, effectiveness of assessment tools, etc.).

9. This paper concludes that:

- A relatively small number of jurisdictions have the powers to review consummated mergers and to impose remedies if they would result in a significant lessening of competition. These include the jurisdictions with a voluntary notification system, and a few jurisdictions with an *ex ante* mandatory notification system. Even in the United States, where notified and cleared merges can be subject to *ex post* investigations, this is rarely done. This approach relies on the need for legal certainty and finality of merger decisions, and to preserve the incentives of firms to engage in M&A activities.
- In recent years, however, a growing number of jurisdictions have adopted *ex post* merger review powers and others are considering them as a way to fill the enforcement gap due to the lack of jurisdiction on mergers which fall below notification thresholds (i.e. they were not notified) but that may nevertheless result in anti-competitive effects once consummated.
- There are important considerations which should guide the authorities' use of such powers. These include the effects that *ex post* merger investigations may have on the incentives to merge, especially if they are applicable also to notified mergers; the availability of proportionate and effective remedies given the status of integration of the parties' assets; the costs of disentangling the consummated merger, and its benefits.
- Divestitures remain the preferable remedial option also in an *ex post* context. Their design and implementation are not prohibitive as demonstrated by experiences in other areas including self-initiated private break-ups, break-ups and structural

remedies in non-merger cases, and experiences with break-ups and structural separation in regulated industries.

- The costs of structural remedies for consummated mergers can be minimised, and the effectiveness of such remedies increased, if they are imposed as closely as possible to the implementation of the merger or, if later, when it is still possible to identify “fault lines” between the merged businesses. This is the case especially for divestitures in *ex post* reviews of vertical mergers or when there are conglomerate concerns.
- When structural remedies are not a viable solutions to the concerns identified, competition authorities should also consider adopting behavioural / conduct remedies, whose limitations appear to be less significant when designed in an *ex post* context.
- In an *ex post* context, behavioural / conduct remedies can be suited to target competition issues especially in mature markets, in markets where products are homogeneous and price structures simple, and not subject to substantial dynamic changes. Finally, if they are flexible enough to still be revisited after some time, to account for relevant changes in the market.

10. This paper is organised as follows: **Chapter 2** describes the current landscape of the existing powers for the review of consummated mergers and touches on their policy rationale. **Chapter 3** explores experiences and challenges with remedial actions for consummated mergers, including considerations on the use of structural and behavioural remedies, lessons learnt in multiple break-up scenarios and aspects related to the implementation of remedy packages. Finally, **Chapter 4** presents key findings.

2. Reviewing consummated mergers - current landscape and policy rationale

11. While explicit powers to review consummated mergers remain rare, the recent policy debate and examples from some jurisdictions which are considering introducing such powers give new momentum to the debate. This chapter discuss the policy rationale in support and against *ex post* merger review powers, as it may affect the discussion on the optimal remedial actions available to authorities, which will be discussed in chapter 3. It will then discuss briefly how consummated mergers are treated under the different merger review systems; it will present recent proposals to grant competition authorities with such powers, as well as discuss the residual tools available to authorities who would like to address the effects of consummated mergers (and potentially remedy them) should *ex post* merger review powers not be available to them.

2.1. Policy considerations for *ex post* merger review powers

12. There exists an extensive literature discussing the multiple policy arguments in favour and against the adoption of *ex post* review powers by competition authorities for consummated mergers. While the purpose of this paper is not to review in depth those arguments, it is important to refer to them as they may be relevant for the later discussion on the optimal remedial actions available to authorities who can indeed review consummated mergers.

2.1.1. Policy arguments in support of ex post merger review powers

13. The main, and probably more obvious, policy argument in support of *ex post* merger review powers is that they simply allow competition authorities to pursue ***better competitive outcomes*** in light of the uncertainty inherent to *ex ante* merger analysis regarding the ability to predict future market structures and behaviours of firms. The review of a merger after its consummation reduces the ***risk of enforcement errors*** inherent to the use of predictive analysis in *ex ante* merger reviews (Kwoka and Valletti, 2021, p. 7[8]). It is possible that the actual competitive effects of a merger are much more deleterious than predicted. In this case, an *ex post* challenge to the previously reviewed and cleared merger may be able to abate the merger's competitive harm (Patel, 2020[9]). In other words, the analysis of the competition authority goes from a speculative to an actual assessment of the effects of the transaction in the market. This may be particularly useful in dynamic markets where *ex ante* reviews risk being unable to account accurately for all future market developments.[10] When added to ex ante review powers, errors of judgment and analysis can be amended and, by definition, one can expect better outcomes.[11]

14. The availability of *ex post* review powers also allows ***administrative and regulatory savings*** for both the competition authority and the parties, as it allows the merger notification threshold to be set at a not too low level, limiting the number of filings that business have to make and authorities to review. A post-consummation review operates as a "fail-safe" mechanism, allowing transactions to be reviewed even if they are not subject to notification.[12] This increases the overall efficiency of the notification systems without creating an enforcement gap. As the ABA states "*There is always pressure to ensure that the notification thresholds are not so high as to allow for too many below threshold, potentially problematic transactions to avoid review. This pressure increases if there is no possibility of post-consummation review and increases further if only notifiable transactions can be challenged, whether premerger or post-consummation*" (ABA Antitrust Law Section, 2020[10]).

15. Moreover, investigation of consummated mergers, in contrast to *ex ante* merger control, offers to competition authorities the possibility to rely on ***hindsight from the market response*** to the merger in order to assess the actual competitive effects of the transaction (Patel, 2021[11]). This includes the possibility to define the market more precisely and to observe how prices, quantities and other competitive variables have evolved, to define more accurately the effects on innovation, entry/exit trends, among other things. In this respect, *ex post* analysis increases the availability of actual evidence of the competitive effects caused in the market. This makes it easier for authorities to establish the theories of harm and, in case of an *ex post* merger investigation, the optimal design of the required remedies (Kwoka and Valletti, 2021, p. 7[8]). Information is crucial for the effectiveness of merger control given the need to establish correctly the impact of a transaction on consumers. Therefore, the ability to access such information after the completion of the merger facilitates the competition authorities' task significantly.

16. The ability of competition authorities to review mergers *ex post* also generates a ***disciplining effect on the market behaviour of the merged entity***. The threat that market conduct post-merger may lead to an *ex post* merger investigation (and potentially to corrective measures, including divestitures) might act as an effective deterrent for anti-competitive conduct (Nevo, 2021, p. 4[12]). These advantages translate into positive effects on markets and consumers, by allowing competition authorities to better address the increasing market power and reduced competition in markets where the merger has significantly affected the competitive structure of the market.

17. The supporters of these powers stress that the advantages of reviewing consummated mergers go from a more precise and certain analysis of the transaction and its effects on the market, including more and better information and evidence, to positive effects over the parties' conduct after the consummation of the transaction. This would ultimately allow authorities to better protect consumers and the competitive process, by ensuring that mergers do not result in structural changes limiting effective competition in the market.

2.1.2. Policy arguments against ex post merger review powers

18. Commentators have also identified challenges and downsides associated to the ability of competition authorities to review mergers after their consummation. These challenges concern the competition authority, the business and consumers alike.

Challenges for competition authorities

19. One challenge that competition authorities may face when equipped with *ex post* merger review power is ***detection of cases to investigate***. Authorities would need to track merger activity to determine whether any non-notified merger may give rise to a substantial lessening of competition. This implies that resources should be dedicated to mergers intelligence to scan sources of information on non-notified or non-notifiable mergers with potentially anti-competitive effects and flag them as potential candidates for investigation. While this tasks are common in jurisdictions with voluntary notification systems (see chapter 2.2.1), in *ex ante* mandatory notification systems detection of non-notified mergers is less common as the majority of resources are dedicated to the assessment of the mandatory filings.

20. Furthermore, the availability of more evidence and information on anti-competitive effects in the market might not be sufficient to challenge a consummated transaction. There might still be costs and difficulties in challenging a consummated merger given the need for the competition authority to ***prove a causal link*** between the anti-competitive effects identified and the transaction itself. According to (Muris and Nuechterlein, 2020, pp. 30-31[13]), the competition authority would have to prove that the but-for world—that is, the world that would exist today had the authority blocked the merger before consummation—would likely be more competitive than the actual world in which the merger has occurred. The authority has to prove that the concerns are not a natural consequence of other market dynamics or developments in the market but that that they are the direct consequence of the consummation of the merger. The establishment of such causal link might be particularly difficult in dynamic markets, where changes in the structure and conduct of firms occur fast and relate to different exogenous factors possibly unrelated to the transaction under review[13] (Sher, 2004, p. 97[14]).

21. Because of the need to establish a clear nexus between the transaction and the anti-competitive concerns, the review of consummated mergers may also results in ***potentially lengthy and time-consuming litigation/investigation processes*** (Givensky, 2013, p. 89[15]). This is a factor that needs to be considered carefully by the authorities when deciding whether to challenge the merger or not. For example, the lengthy investigation and litigation of Microsoft in the 1990s and early 2000s, first by the US FTC and then the US Department of Justice, sought to break up the company. Despite the case generally having been considered a win for the antitrust agencies (and for the economy), Microsoft was not broken up. Case prioritisation, therefore, is particularly important in *ex post* reviews, so that authorities allocate resources efficiently (OECD, 2014, p. 17[1]).

22. Another potential downside for the authorities is the risk that their intervention may result in ***sub-optimal remedial actions*** as it might not be possible to restore the degree of competition in the markets that existed pre-merger (Patel, 2020, pp. 33-34[9]). This risk increases the more time has passed between the closing of the merger and the opening of the *ex post* merger investigation. Challenges related to remedies will be discussed in chapter 3.[14]

Challenges for businesses

23. One of the most important concerns with competition authorities' powers to review consummated mergers is the direct effect it has on businesses and on their incentives to engage in M&A activities (OECD, 2014, p. 18[1]). The mere existence of *ex post* review powers undermines one of the main features of merger control: finality of merger decisions and legal certainty that a non-notifiable merger or a merger, which was cleared by an authority will not be subject additional scrutiny in the future (ABA, 2018, p. 2[16]). Unpredictability as to whether an authority will decide to take an enforcement against a consummated merger might ***chill incentives and willingness of firms to engage in merger activity*** in the first place, even if efficiency-enhancing (Sher, 2004, p. 63[14]). This may translate into potentially chilling pro-competitive market behaviour when there is a risk that a competition authority may see it as abusive/anti-competitive.

24. The threat of a post-closing merger challenge and subsequent remedies also ***lowers the incentives to invest in product development*** (Sher, 2004, p. 98[14]). A post-closing investigation, especially if this occurs after a significant period after closing, increases the risk of losing product development that took place after the merger was consummated. Should the authority decide to intervene against a consummated merger, the merged entity might also be put at a disadvantage vis-à-vis its competitors who have continued their independent product development.[15]

25. In cases where mergers falling below the notification thresholds could also be subject to *ex post* scrutiny, the ***increase in transaction costs*** is also evident. Merging parties would need to assess whether they voluntarily inform the transaction to reduce uncertainty and whether such notification is worth it with respect to the increased value of the transaction (Potter, Jones and McElwee, 2014[17]).

Challenges for consumers

26. Finally, there could also be downsides for consumers in general. *Ex post* merger reviews leading to remedies, regardless of their type, might have as a result the disruption of market dynamics (Givensky, 2013, p. 96[15]) and, depending on their scope, could cause ***loss of the benefits for consumers*** due to the loss of efficiencies generated by the consummation of the original transaction. A loss in competitiveness could also be translated into weaker ability and willingness of the merged company to perform effectively in the market, invest and innovate, generating potential losses in consumer welfare and efficiency in the market (Sher, 2004, p. 98[14]).

2.2. The treatment of consummated mergers in different merger review systems

27. As it clearly emerged from the 2014 discussion on consummated mergers (OECD, 2014[1]), an important distinction must be made between jurisdictions with a ***voluntary*** merger notification system, and jurisdictions with a ***mandatory*** pre-notification system.[16] Within the countries that have adopted a mandatory pre-notification system, particularly with notifications pre-merger, there is a growing number of jurisdictions where the competition authority has explicit powers to review consummated mergers and to impose

remedies if such mergers resulted in a significant lessening of competition. There is also a small number of jurisdictions that have adopted ***hybrid*** notification systems. They impose mandatory notifications for transactions that exceed the notification thresholds but allow for a voluntary notification of mergers that fall below the notification thresholds.[17] Most of the issues discussed in this paper will apply equally to them as well.

2.2.1. Consummated mergers in voluntary and mandatory notification systems

28. In a **voluntary** system (see Box 2.1), merging parties do not have an obligation to notify their transaction to the competition authority, but the latter may take jurisdiction over the transaction to review it before or after closing, and define whether it has anti-competitive effects. In such cases, remedies and reversal of transactions post-closing are generally available to the competition authorities.

29. The possibility of an *ex post* analysis is therefore an intrinsic feature of voluntary notification systems. However, none of the jurisdictions with a voluntary notification system allows the authority to voluntarily assess *ex post* a transaction, which has been notified to it prior to closing or which has been assessed by the authority already before or after closing. Previously cleared mergers can be reviewed only under specific circumstances, such as appeals to the decision of the authority to higher courts or when the notification was submitted with misleading or false information in the voluntarily filing.

30. Voluntary notification systems recognise the interests of avoiding an excessive regulatory burden on businesses limiting regulatory review only to those transactions that warrant reviews. However, the fact that the merging parties may decide that their merger should not be voluntarily notified to the authority does not mean that the competition authority will not review it. Competition authorities in voluntary notification systems have a duty to track merger activity to determine whether any non-notified merger may give rise to a substantial lessening of competition. Dedicated merger intelligence units are responsible for monitoring non-notified merger activity and decide whether to pursue any of them. In the UK, for example, the CMA will take a decision to investigate a non-notified merger if it believes that there is a reasonable chance that the test for a reference to an in-depth phase 2 investigation will be met (i.e. there is a reasonable probability that an investigation will identify a merger situation that gives rise to a realistic prospect of a substantial lessening of competition).[18]

Box 2.1. Voluntary merger regimes in OECD jurisdictions

Voluntary merger regimes are not common in the international landscape. Amongst the OECD jurisdictions, three have voluntary merger regimes (Australia, New Zealand and the United Kingdom). Other non-OECD jurisdictions with voluntary merger regimes include Panama and Singapore.

In **Australia**, there are two options when notifying a transaction voluntarily: informal merger review or authorisation. Merger parties may seek statutory protection from legal action under Section 50 of the 2010 Competition and Consumer Act, by lodging an application for merger authorisation, which provides protection from legal action. However, the most common option sought by merging parties is the informal clearance, which enables them to have the Australian Competition and Consumer Commission – ACCC's informal view on whether the merger is likely to contravene Section 50 (OECD, 2014, p. 2[18]) and (OECD, 2018[19]). In the Merger Guidelines issued by the ACCC, the authority developed a set of criteria to advise merger parties on when it would be recommended to notify the transaction. Merger parties are encouraged to notify the ACCC when the products of the merger parties are either substitutes or complements and the merged firm will have a post-merger market share of greater than 20 per cent in the relevant market(s) (ACCC, 2008, p. 11[20]).

Similarly, the Commerce Commission in **New Zealand** established some indicative thresholds for notifying mergers in their Mergers and Acquisitions Guidelines (Commerce Commission New Zealand, 2019, p. 7[21]) and (OECD, 2018[22]). The Guidelines identify the circumstances in which a merger is less be likely to raise competition concerns: 1) where post-merger, the three largest firms have a combined market share of less than 70% and the merged firm's share is less than 40%; or 2) where post-merger, the three largest firms have a combined market share of 70% or more and the merged firm's share is less than 20%.

Finally, the Enterprise Act 2002 in the **United Kingdom** recommends notification of mergers where one or more of the following criteria are satisfied: the UK turnover associated with the acquired enterprise exceeds GBP 70 million or the two enterprises supply or acquire at least 25 per cent of the same goods or services supplied in the UK (or a substantial part of it) and the merger increases that share of supply (CMA, 2021, p. 5[23]) and (OECD, 2018[24]).

31. The large majority of merger control regimes around the world requires mandatory pre-merger notification for transactions that meet certain thresholds defined using criteria, such as turnover, asset, market share, or transaction value. In jurisdictions with **mandatory** pre-notification systems, the competition authority has the power to review transactions that meet certain jurisdictional thresholds and the merging parties have an obligation to notify transactions falling within the jurisdictional reach of competition authority.[19] Filing must take place prior to their closing and the consummation of the merger is suspended until the approval of the authority (so-called suspensory effect of the notification).[20]

32. Mandatory pre-notification systems usually rest on two essential features:

1. Transactions falling below the notification thresholds escape merger scrutiny completely as they are assumed not to have anti-competitive effects.

2. Once a merger has received clearance by the reviewing authority, it cannot be investigated again under the merger rules, except in special circumstances (see chapter 2.3).[21]

33. Thus, in most jurisdictions with a mandatory pre-notification system, there is no room for *ex post* reviews of notified mergers unless expressly foreseen by the merger law itself.[22]

2.2.2. Jurisdictions with explicit powers to review consummated mergers

34. Some jurisdictions with *ex post* merger review powers have granted jurisdiction to the competition authority to review transactions that fell below the thresholds or were otherwise exempted from the obligation to notify. These powers are considered as a “safety valve” for the merger system, allowing competition authorities to intervene against anti-competitive mergers, which normally would not have fallen into is jurisdictional remit. This group includes the merger regimes of jurisdictions such as Brazil, Canada, Chile, Ireland, Japan, Korea, Latvia, Lithuania, Mexico, Norway, Peru, Slovenia and Sweden (see Box 2.2). The use of these powers, however, is generally subject to conditions. In a number of jurisdictions, the competition authority can review a non-notified merger when the merging parties did not meet individual thresholds but meet the combined one, or when there is evidence of potential anti-competitive effects of the transaction. In most cases, the powers granted to authorities to review the consummated mergers are time-bound, with limits going between three months from the consummation of the merger (as is, for example, the case in Norway) to up to five years (in the case of Korea).

Box 2.2. *Ex post* review powers in Sweden, Brazil and Peru

In **Sweden**, if the combined thresholds are met by the merging parties but the individual thresholds for each party are not, the merging parties can voluntarily notify the transaction or the competition authority may require the parties to notify it when particular grounds exist for doing so.[1] These include the acquisition of small competitors in subsequent mergers, or the acquisition of a newly established undertaking in a concentrated market, when such undertaking has a potential to challenge the position of the acquirer in the future (so-called maverick competitor) (Swedish Competition Authority, 2018[25]). Complaints from customers and competitors may also constitute grounds for requiring notification (OECD, 2014[26]). According to the Swedish Competition Authority, since 1997, the authority has required companies to notify their transaction in six cases.[2]

In **Brazil**, since 2012 the competition authority (CADE) has the power to review mergers that do not meet the notification thresholds. CADE's powers to review non-notifiable mergers are limited to one year after the consummation of the merger. They were given to the authority due to the size of the country and the possibilities that regional mergers with anti-competitive effects may go undetected.[3] Between 2012 and 2019, CADE has used these powers rarely, i.e. in only three cases.[4] Two of them were closed with an unconditional clearance (OECD, 2019, pp. 84-85[27]) and the most recent one was cleared on condition that the merged company would not make any acquisitions of rivals in the next two years and that it would notify CADE of all transactions in such period.

More recently, in 2021, **Peru** enacted its Antitrust Merger Review Act[5], establishing a general merger review regime for the first time in the country. The Technical Secretariat of the Commission for the Defense of Free Competition of INDECOPI may open *ex officio* cases where there is reasonable evidence that the merger transaction may generate a dominant position or affect effective competition in the relevant market. The law also allows for voluntary notification when the companies merging do not reach the filing thresholds.

Notes:
[1] Chapter 4, Article 7 of the Swedish Competition Act.
[2] Since 2010, 20 voluntary notifications have been registered by the authority, nine in the past five years (2017-2021), accounting for 2% of the total number of mergers notified in the same period. The most recent voluntary notification was made in 2021 by *Conaxess Trade Sweden AB*, who acquired *Swedish Movement Group*. Both firms were active in the market for the distribution of fast moving consumer goods in the Scandinavian region. See: (Swedish Competition Authority, 2022[28])
[3] Article 88.7 Law No. 12 529 of 2011.
[4] The cases are: (i) Merger File No. 08700.006497/2014-06 *Greca Distribuidora/ Betunel/ Centro Oeste Asfaltos*; (ii) Merger File No. 08700.005959/2016-21 *Mallinckrodt Group / Guerbet*; and (iii) Merger File No. 08700.005972/2018-42 *All Chemistry / SM Empreendimentos*.

35. The United States is the jurisdiction where the agencies' power to review merger post consummation is the widest (see Box 2.3). The US merger control system grants the competition authority a general power to investigate any past transaction, regardless of whether it was notified (and cleared) or not and of how much time has passed since the merger was consummated.[23] Despite the agencies' ability to challenge already reviewed

and cleared mergers, such challenges are extremely rare. According to (Patel, 2021[11]) the US agencies have lodged four *ex post* merger challenges to cleared mergers since 2001.

36. The Hart-Scott-Rodino ("HSR") Act includes thresholds triggering a mandatory notification, but also allows the Federal and State antitrust enforcers to investigate transactions that are not HSR-reportable or that the parties have consummated. Under section 7 of the Clayton Act, US competition authorities can challenge a merger if they can demonstrate that it may have substantially lessened competition, regardless of whether the transaction was already reviewed in the past and not challenged. These powers are not limited in time, and the agencies can review any past transaction even if many years have passed since their consummation. The US case is a unique one.

Box 2.3. Consummated mergers under section 7 of the US Clayton Act

In the United States, Section 7 of the Clayton Act of 1914[1] explicitly allows competition authorities to investigate and challenge consummated mergers, when they may substantially lessen competition. However, only until 1976, when the Hart-Scott-Rodino ("HSR") Act was enacted, companies started to be required to notify transactions meeting certain thresholds before closing the transaction. As a result, the HSR Act reduced significantly the number of post-merger investigations, but it did not eliminate all such review. Section 7(A) I of the HSR Act states that the fact that the agencies reviewed and cleared a reported merger does not preclude their powers to challenge such transaction later.

In 2001, the HSR thresholds increased materially, leading to a subsequent increase in post-merger challenges (Akin Gump Strauss Hauer & Feld, 2012[29]). In 2012, consummated merger challenges represented close to one-fifth of the total Federal Trade Commission’s challenges (J. Thomas Rosch, 2012[30]) and, in the past years, they became one of the focus of the agencies’ resources (Givensky, 2013[15]). The most recent Executive Order on Promoting Competition in the American Economy in 2021 (Biden JR, 2021[31]) reaffirms the authority to challenge transactions whose previous consummation was in a violation of the antitrust laws.

One of the most recent *ex post* challenges to a cleared merger occurred in 2017 by the Department of Justice in the case Parker-Haniffin/Clarcor, related to fuel filtration products for aviation (Justice, 2017[32]), after the transaction was cleared by the authority, by letting the waiting period expire. Parker-Haniffin settled with the DoJ in a settlement that included the divestiture of specific assets that were the source of the competitive harm alleged by the U.S. Department of Justice (Justice, 2017[33]).

Note:
[1] Clayton Act §7, 15 U.S.C. §18.

2.3. Residual powers available to competition authorities to address and possibly remedy the effects of consummated mergers

37. Already in 2014, the OECD concluded that mergers falling below notification thresholds do not escape necessarily all antitrust scrutiny even in jurisdictions where *ex post* merger review powers do not exist. Depending on how other competition law provisions are structured and applied, the perceived enforcement gap for non-notifiable mergers can be filled potentially through residual competition powers. The OECD also

noticed that there are important limits to the enforcement of general antitrust rules, which make such alternatives very rarely applicable in practice (OECD, 2014, p. 9[1]).

38. For many years, in jurisdictions which did not have merger control regimes at all, it was often debated if mergers remained subject to the enforcement of the general antitrust prohibitions of anti-competitive agreements between competitors and of abuses of dominance. This debate is currently mostly mooted[24], since many jurisdictions have now explicit merger control powers.[25] However, it can still offer some insights on how non-notifiable mergers could be scrutinised in the absence of explicit *ex post* review powers. While the application of competition provisions on agreements between competitors and on abuse of dominance provisions was recognised as applicable – at least in principle– to merger agreements, where a firm was acquiring a competitor,[26] the debate has largely focused on the important limitations that provisions designed to scrutinise firms' conduct have when used to review structural events such as mergers.

39. These limitations, which would of course also apply if a competition authority were to consider this possibility to scrutinise a consummated mergers, are of various nature.

40. Provisions against ***abuses of a dominant position***, for example, require a pre-existing dominant position that arguably would be strengthened through the elimination of a competitor by way of the merger. An additional strong limit to the use of this type of provisions concerns the remedial actions available to the competition authority, since only few authorities can impose remedies (especially structural remedies) in abuse cases to re-establish competition in the market.[27] Most competition authorities can only adopt cease-and-desist orders and impose pecuniary sanctions that, setting aside their deterrent effect, would not allow the disentangling of the merged entity (OECD, 2006[34]).

41. As for the use of the provisions on ***anti-competitive agreements***, the authority could only scrutinise merger agreements between actual or potential competitors, but would not be able to scrutinise situations where the parties to the transaction would not have any horizontal or vertical relationship. This would be the case, for example, of conglomerate mergers. Similar to abuse of dominance cases, no remedy is generally possible should an infringement be established but only fines and cease-and-desist orders. In other words, such interventions would be ineffective in restoring the level of competition existing prior to the merger.

42. Since 2014, when the OECD last discussed the powers of competition authorities to review consummated mergers, the Secretariat has deepened its knowledge of another tool in the arsenal of competition authorities, i.e. market studies and market investigations. This work revealed the potentials that such instruments offer to authorities wishing to do retrospective competition analysis (including of consummated mergers) when assessing the quality and intensity of competition in specific markets or industry sectors.

43. In a ***market study***, competition authorities assess whether competition in a market is working effectively, and identify measures to address any competition issues that they have detected. The scope of the analysis is wide and the approach flexible, allowing also to assess *ex post* the impact of merger activity, including of non-notified mergers, if they contributed to a lack of competition in the market. However, the weakness of this tool is the lack of enforceable remedies, as they usually lead to non-binding recommendations, often addressed to the government, to introduce legal reforms to promote more effective market competition. In that respect, while they could be an effective detection tool for competition problems caused by consummated mergers, they may not offer optimal remedies to address those effects.

44. ***Market investigation*** powers, on the other hand, are not common.[28] They differ from market studies powers as they allow authorities to impose remedies –including

structural ones– to address the competition concerns identified during the market analysis (See Box 2.4). Consequently, a market investigation could be used to restore the competitive situation affected by consummated mergers but, as far as the Secretariat is aware, this has never been done so far.

Box 2.4. Retail Banking Market Investigation in the UK

The United Kingdom is one of the few jurisdictions where the competition authority, the Competition and Markets Authority (CMA), can impose remedies, including structural break-ups, after a market investigation.[1] A wide variety of sectors and markets have been analysed under these provisions, including digital comparison tools, groceries, retail banking, energy, private healthcare, and residential care homes, among others.

The CMA launched in 2014 the Retail Banking Market Investigation to determine whether any feature or combination of features in the markets for retail banking services to personal current account customers (PCA) and to small and medium-sized enterprises (SME) in the UK resulted in anti-competitive effects (CMA, 2014[35]). Three theories of harm were initially identified:

- Impediments to customers' ability to effectively shop around, choose and switch products and suppliers, resulting in weak incentives for banks to compete (including lack of accessible and transparent information to compare offers or make informed decisions about how to use their existing banking services, behavioural biases or pricing structures that limit customers decisions, and costs and risks of switching);
- Concentration giving rise to market power of some banks (with relatively stable market shares through time); and,
- Barriers to entry and expansion (regulatory barriers, economies of scale – branch network, access to finance and payment systems, cross-selling and cross-subsidisation).

In 2016, the CMA published its final report on the market investigation (CMA, 2016[36]) and announced a remedies package that aimed at banks to compete harder in an environment of weak customer response. Particularly, the remedies were designed to increase customer engagement, encourage the development of new services, improve the current account switching process and make information more available and transparent. The remedies could be summarised as:

1. General, foundation remedies to address access and quality of data: introduction of an open API banking standard to share data, publication of service quality data and introduction of prompts for consumers to consider their banking arrangements.
2. Reduction of switching costs: improve awareness of, confidence in and the process of switching current accounts.
3. PCA overdraft customers: increase awareness of and engagement with the overdraft usage and charges.
4. Transparency: of prices, eligibility for SME lending, comparison of products and opening procedures.

The CMA considered imposing structural remedies but concluded that improving competition through divestitures in the market would only be sensible if there would have been strong evidence that market concentration was having an effect on competitive behaviour, which was not the case. Moreover, the CMA considered the Lloyds-TSB divestiture, that took part as a result of a restructuring plan approved by the EC following aid granted by the UK Government in 2009, to assess the costs of a future divestiture in the market and how disruptive it would be for customers and concluded that a structural remedy would not be effective nor proportionate for the concerns found.

Note:
[1] Under the Enterprise Act 2002 provisions. See (Fletcher, 2020[37])

45. To conclude, these are powers of last resort when it comes to reviewing the effects of consummated mergers. The limitations discussed in the previous sections are normally associated to the fact that these powers have different triggering conditions and respond to different policy objectives than merger control. While these powers can offer ways to address the enforcement gap in jurisdictions where consummated mergers are not reviewable under the merger rules, in general, they result in imperfect substitutes for *ex post* review powers.

2.4. Reform proposals to grant competition authorities the powers to review consummated mergers

46. As discussed above, in only a few countries competition authorities can review consummated mergers that were not previously notified. As jurisdictions perceive that an increasing number of transactions (especially in the digital sector[29]) have been consummated without prior antitrust scrutiny because they were not notifiable, proposals were put forward to allow for the *ex post* review of consummated mergers. While these proposals emerged in the context of the debate on the so-called "killer acquisitions", they are not limited to killer acquisitions but would apply to any other transaction that might be distortive of competition and was not reviewed by the authority under to the current regime.

47. In 2021, **Italy** planned to adopt powers to review transactions falling below the individual thresholds but have a minimum combined turnover,[30] particularly in the digital sector. The Italian Competition Authority submitted a proposal that was approved by the Italian Council of Ministers amending the Italian Competition Law.[31] The draft law is currently going through legislative process in the Parliament for formal adoption and is expected to be adopted at most at the end of 2022. The most relevant modification for the purposes of this paper consists in the possibility for the competition authority to review consummated transactions when three conditions are met: (i) the transaction has been implemented in the previous six months; (ii) only one of the thresholds is met or the global turnover of all the undertakings exceeds EUR 5 billion; and (iii) there are appreciable risks to competition in the national market or in part thereof.[32]

48. In February 2022, **Ireland** published an amendment to the Competition Bill (Department of Enterprise, Trade and Employment, 2022[38]), which is currently going through the legislative process and expected to be adopted in the forthcoming months.[33] Among the proposed changes to the Irish competition system, the amendment would allow the Irish competition authority to issue interim orders to prevent the implementation of transactions, even where a voluntary notification was filed or to unwind completed mergers to restore and safeguard competition.[34] The Bill would also grant to the competition authority the power to require the notification of transactions that fall below thresholds and may affect competition within a limited period.[35]

3. Remedial actions for consummated mergers – experiences and challenges

49. In the debate on consummated mergers, a key issue relates to the availability of effective remedial actions that competition authorities can put in place if they have

jurisdiction over consummated and anti-competitive mergers. The difficulty with identifying effective remedies to untangle the anti-competitive merger has often been used as an argument against the use of such powers by competition authorities.

50. This chapter discusses the use of merger remedies in general and in investigations of consummated mergers. Some of the aspects that will be explored are the time frame used for the analysis of the transaction and the purposes of the remedies, the challenges with unwinding a consummated merger, the use of behavioural remedies instead of (or as a complement to) structural ones and the implementation process of the remedy package. This section builds on the experiences and challenges of competition authorities when dealing with consummated mergers, as well as experiences from private break-ups or from structural separation in other enforcement areas.

3.1. The use of mergers remedies in an *ex ante* merger review context

51. In most merger regimes around the world, mergers that raise competition issues can often be authorised subject to remedies, i.e. measures that eliminate the competitive concerns that may result from the transaction preserving the benefits and efficiencies from the integration. Only in few situations, the anti-competitive effects are such that they cannot be remedied. In those cases, competition authorities have to block the transaction. According to the OECD CompStats database, on average, 97.1% of the mergers notified between 2015 and 2020 in 73 jurisdictions were cleared without remedies, 2.2% were cleared with remedies, and only 0.7% were prohibited. This is, out of close to 9 000 mergers notifications made annually in 2015 to 2020 in the world, remedies were imposed in 196 cases on average.

52. In *ex ante* merger reviews, remedies aim to eliminate the risks that the transaction may pose to competition and allow for the approval of mergers that otherwise would have to be prohibited. Merger remedies can be either ***structural***, when they require some form of divestiture of assets, ***behavioural***, when they create obligations and conditions on the conduct of the merged entity; or ***hybrid***, where behavioural remedies complement structural ones (see Box 3.1).

Box 3.1. A classification of remedies: structural and behavioural

One conventional classification of the remedies available in merger review is structural and behavioural.

Structural remedies are one-off remedies that intend to restore the competitive structure of a market and refer to divestitures of either a stand-alone, ongoing business and its related assets, as well as physical assets or other rights. They typically include:

- the divestiture of an existing business or,
- the divestiture or licensing of intellectual property rights; but also
- the divestiture of a collection of assets or parts of existing businesses that are sufficient to allow the buyer to compete effectively.

Structural remedies aim at addressing the competitive concern of the transaction by creating a new source of competition or strengthen an existing player to maintain the level of competition in the market.

Behavioural remedies, sometimes also referred as conduct remedies, are designed to modify or constrain the behaviour of the merged entity. Their objective is to encourage competition in the market by establishing conditions or prohibitions on the conduct of the market players, mainly to prevent the merging entity from restricting competition. As they come in a large range of shapes and sizes depending on the market being analysed and its dynamics, the most common ones relate to:

- Facilitating horizontal rivalry, including requirements to supply to third parties on fair and reasonable terms (including data and access to inputs), restricting upstream exercise of market power or potentially anti-competitive effects of vertical relationships, prohibiting tying of services, the use of contractual barriers to control determined inputs or supply critical information, among others; and,
- Controlling outcomes, restricting information sharing between parties and modifying relationship with end-customers and other conduct restrictions.

Sources: OECD Competition Committee Roundtables on Remedies in Merger Cases (2011) and Merger Remedies (2003) and (ICN, 2016, pp. 8-9[39]).

53. There is an extensive literature on the benefits and drawbacks of each type of remedy but the general view of competition authorities is that **structural remedies** are the preferred option (OECD, 2011[40]) and (OECD, 2003[41]) (see Box 3.2). Generally, authorities value the one-off nature and the relatively straightforward character of structural remedies in so far as once implemented successfully, they address directly and once and for all the concern identified without the need for subsequent long-term monitoring. Their drawbacks, on the other hand, include high costs to the merging parties, potential disruptions of relationships with customers, the need to find a suitable buyer that can effectively compete with the merged entity post-transaction, and their irreversibility (given the fact that some of the feared competitive risks may be transitory). Structural remedies aim at creating permanent changes in the market structure that counteract the structural changes created by the merger under review and, if designed correctly, they can efficiently eliminate the anti-competitive effects of the transaction (Khan, 2019, p. 980[42]).[36]

54. **Behavioural remedies**, on the other hand, are often difficult to design. They need to capture all possible future eventualities, and that can be complex, especially in dynamic markets; they also require monitoring to ensure that the merged entity is adhering to them in the months and years following the consummation of the merger. This is costly: long-lasting oversight of a company's behaviour is something competition authorities typically are neither well equipped nor entrusted to do (OECD, 2011[40]) and (OECD, 2003[41]). Their relative complexity and lengthy remedy implementation procedures may prevent behavioural remedies from achieving their desired results (Ezrachi, 2005, p. 2[43]). If not sufficiently flexible, behavioural remedies risk hampering the firm's ability to adapt effectively to changes in the market conditions, requiring regular revisions by the competition authority when significant changes in the market dynamics occur.

55. Despite their downsides, which make authorities more inclined to consider structural remedies, behavioural remedies have been identified as being particularly useful in some situations (OECD, 2011[40]) and (OECD, 2003[41]):

1. when structural remedies are not available, or they are impractical or disproportionate to the effects of the transaction;
2. in mergers with vertical / conglomerate elements, to preserve potential efficiencies from the transaction;
3. when there is a need for a more flexible (or less permanent) solution, for example, in rapidly evolving markets;
4. as complements to structural remedies to ensure viability and effectiveness of the intervention; and,
5. in small economies, where structural remedies might be more difficult to implement, making behavioural remedies the residual option for competition authorities.

Box 3.2. Preference for structural remedies in merger remedies guidelines

Most of the jurisdictions with an active merger control regime have issued merger guidelines with the objective of outlining the main practices competition authorities have with respect to the evaluation of mergers and acquisitions. Many jurisdictions have also issued guidelines specific to remedies in merger cases which provide a framework for structuring and implementing them. These guidelines often include discussions of potential issues that might arise with different types of remedies, including the advantages / disadvantages of imposing structural remedies or behavioural ones and the scenarios where behavioural remedies might be more appropriate or could act as complements to divestitures.

For instance, the Merger Remedies Manual published by the Antitrust Division of the US Department of Justice states that divestitures of existing stand-alone businesses are always preferred to best achieve the goal of preserving competition (US DOJ, 2020, p. 13[44]). This is because they are more effective, simple, clear and easy to administer. Moreover, according to a study by the Federal Trade Commission on merger remedies, divestitures succeeded at higher rates than divestitures of selected assets and other non-structural remedies (FTC, 2017[45]). Nevertheless, the guidelines recognise that conduct remedies might be useful to facilitate the implementation of structural ones, when divestitures are not possible or if significant efficiencies of the transaction get lost through the imposition of a structural remedy and a behavioural one can cure the harm and be enforced effectively (US DOJ, 2020, pp. 13-16[44]).

In the EU, the conclusions are somewhat similar. The Notice of the European Commission on remedies issued in 2008 recognises as a general principle that commitments which are structural in nature are, as a rule, preferable as they address the competition concerns raised by the transaction, and do not require medium or long-term monitoring measures (European Commission, 2008, p. 6[46]).

The UK's competition authority also has a preference for structural remedies over behavioural ones. The CMA's merger assessment guidelines note that structural remedies can deal with anti-competitive effects in a more comprehensive manner, resulting in less market distortions and requiring less enforcement and monitoring once implemented (CMA, 2018, p. 17[47]).

Other jurisdictions such as Australia, Brazil, Canada, Colombia, Korea, and Singapore, among others, follow the same approach.[1] While they agree on the usefulness of behavioural remedies in specific situations, such as complements to divestitures for their effective implementations or in vertical transactions, they express a strong preference for structural remedies or for a combination of both structural and behavioural remedies, depending on the specific facts and circumstances of each case. Generally, authorities acknowledge that structural remedies are typically more effective, usually necessary to eliminate the substantial lessening of competition arising from a merger, and are more easily enforceable.

Notes:
[1] See the respective merger guidelines: (ACCC, 2008[20]), (CADE, 2018[48]), (Competition Bureau, 2006[49]), (Superintendencia de Industria y Comercio, 2019[50]), (KFTC, 2017[51]) and (CCCS, 2016[52]).

3.2. The use of remedies in *ex post* reviews of consummated mergers

56. In general, authorities who have powers to review consummated mergers do not apply a separate or different remedies policy specific for these types of reviews. The same policy approach for merger remedies applies to both non-consummated and consummated mergers. However, considerations on the design of such remedies may differ as the challenges in designing effective remedies *ex ante* or *ex post* may vary. For example, there might be differences between the ways an authority approaches a structural remedy as opposed to a complete disentangling of a consummated merger, which would be the *ex post* equivalent to blocking the merger *ex ante*. Moreover, a complete disentangling of the merger may be more demanding than just imposing a limited asset divestiture.

57. This section will discussion the need for establishing a causal link between the merger and the remedies, as well as the need for remedies to be viable and proportionate. It will also review experiences and lessons with designing remedies in consummated mergers, particularly with respect to (i) the relevant moment in time for the review of the merger and the design of the remedy, (ii) the challenges faced by authorities when designing structural remedies, and (iii) the approach to behavioural remedies in an *ex post* context.

3.2.1. Nexus, viability and proportionality of remedies

58. As discussed above, investigations of consummated mergers offer competition authorities the benefit of relying on the observations of the *actual* effects that the merger has in the market as opposed to speculating *ex ante* on its *likely* future effects. Competition authorities also have easier access to market data and to internal data that can help them assessing more precisely the competitive effects of the transaction in the market, which would not be available when the analysis is predictive and *ex ante*. The availability of actual evidence of the anti-competitive effects caused makes it easier for authorities to establish the theories of harm but also and, more importantly for the purpose of this paper, to identify the impact of the merger on competition and to intervene more precisely to fix the actual concerns generated by the transaction.

59. However, before an authority can impose remedies in *ex post* cases, there is a need to establish a clear ***nexus/causality link*** between the competition concerns identified during the investigation, the transaction and the potential remedies. As in *ex ante* merger cases, the authority must prove that the but-for scenario absent the merger would likely be more competitive than the actual world with the merger. According to some authors (Muris and Nuechterlein, 2020, p. 19[13]), in case of intervention against consummated mergers, the burden of proof on the investigating authority is higher than in an *ex ante* context. Beyond the *nexus* between the transaction, the harm and the remedy, the competition authority would also need to prove that it was ***foreseeable*** at the time of consummation that the merger could have raised competition concerns. Equity arguments should prevent an *ex ante* pro-competitive merger from being prohibited *ex post* for reasons which are independent from the merger itself (e.g. unexpected exit of competitors from the market substantially increasing concentration after the merger was consummated).

60. When it comes to structuring effective remedies, these have to be ***viable*** but also ***proportionate*** to the identified threat to competition. In practice, especially if the decision is to impose a structural remedy and to unwind the consummated merger, the competition authority would have to prove that the prospective benefits of doing so would outweigh the prospective harm of the de-integration. [37] This means that the discussion on the proportionality of the remedy plays a key role in consummated mergers analysis (Muris and Nuechterlein, 2020, p. 19[13]).

Box 3.3. Consummated merger and public interest considerations in mergers

Specific challenges arise in jurisdictions where the merger regime and the test for assessing mergers do not only take into account allocative efficiency and consumer welfare but also allow for public policy objectives to be taken into account by the reviewing authority. Public interest objectives in merger control are more widespread in non-OECD Members (OECD, 2016[53]). The reasons why these objectives play a stronger role in the merger control of non-Members is the greater use of industrial policies and the wish to align competition policy with the broader government policies ((Lewis, 2002[54]), (S. and Sibanda, 2015[55]) and (Hodge, Goga and Moahloli, 209[56])). The most frequent public interest clauses are socio-economic or socio-political considerations, such as ‘employment’, ‘international competitiveness’, ‘exports’ and ‘promoting stability’ (See the jurisdictions of South Africa, Botswana, Zambia, Kenya and Namibia (Oxenham, 2012[57]), (Machine, 2014[58]), (Smith and Swan, 2014[59])) .

In South Africa, Article 12A (3) of the Competition Act specifies that the relevant competition authorities (the Commission or the Tribunal) must consider the effect that the merger will have on: i) a particular industry or sector; ii) employment; iii) the ability of businesses owned by historically disadvantaged persons to become competitive; and iv) the ability of national industries to compete in international markets. The public interest test is separate from the competition test and even if the merger passes the traditional competition test, public interest considerations still have to be assessed (OECD, 2016[53]).

As will be discussed in the rest of the paper, designing effective remedies in an *ex post* context proves challenging as the passage of time between the closing of the transaction and the investigation allow for a number of exogenous factors to affect the market outcome, making it difficult for the reviewing authority to establish the necessary causal link between the consummated merger and the competitive concerns that have led to the investigation. When the nature of the concerns that the authority needs to take into consideration includes a variety of public considerations, the standard of proof on the authority can be daunting to meet. Similarly, designing appropriate remedies that can address the competition issues and the public policy considerations which are assessed by the authority will significantly increase the administrative burden and the and business costs that are often put forward as arguments against the *ex post* merger review powers.

3.2.2. Experiences with designing remedies in consummated mergers

61. Experiences with investigating consummated mergers are still rare around the world.[38] The use of structural remedies to address competition issues *ex post* is even scarcer. The one notable exception to this are the United States, where the two enforcement agencies have successfully implemented structural remedies in *ex post* merger reviews in many cases. In the United States, close to three consummated mergers have been challenged per year since 2006 (Practical Law, 2020[60]) and other competition authorities could draw important lessons from this experiences on how to design structural remedies to restore the degree of competition which existed under the market structure before the merger (see, for example, Box 3.4).

Box 3.4. Magnesium Elektron / Rever merger in the US

Structural remedies were successfully imposed by the US Federal Trade Commission (US FTC) in the consummated merger between Revere and Magnesium Elektron. The case was ultimately settled in 2012 when the company accepted to divest Revere's assets. The case illustrates a number of important issues for the reviewing authority when designing the remedy, such as the availability of a suitable buyer, the inclusion of assets to assure the correct functioning of the divestiture in the market and the possibility to appoint third parties to guarantee the implementation of the remedy package, facilitating its monitoring by the authority.

In 2007, Magnesium Elektron North America Inc. acquired Rever Graphics Worldwide Inc. the only competitor in the manufacturing and sale of magnesium plates for photoengraving in the world at the time of the merger. While Rever also manufactured and sold zinc, copper and brass plates prior to the acquisition, Magnesium Elektron was only active in the market for magnesium plates.

Five years later, in 2012, the US FTC filed a complaint alleging that the merger violated Section 7 of the Clayton Act. In the complaint, the US FTC referred to the acquisition as a merger-to-monopoly situation within a small market where entry of competitors was unlikely.

The company settled the case with the US FTC (FTC, 2012[61]), who issued a final order including the sale of Revere's assets, particularly with respect to intellectual property and technical know-how (but no physical assets) to manufacture magnesium plates to Universal Engraving, a company which was positioned to become an effective competitor in the market as it was active in other metals markets also used in the photoengraving process. The order also contained other measures to assure immediate entrance of the new competitor in the market and its continuity, such as technical assistance and initial supply of the product and some chemicals used and sold with the magnesium plates.

The order included provisions on the appointment of an Interim Monitor to assure the compliance of all the obligations required in the Order and a Divestiture Trustee to satisfy the requirements of the Order in case it was determined that the parties did not fully comply with it (FTC, 2012[62]).

62. More recently, in 2021, the US Court of Appeals for the Fourth Circuit upheld a decision made by the US District Court for the Eastern District of Virginia for a divestiture of a consummated merger that came from private litigation after the merger was cleared by the US Department of Justice (see Box 3.5). It is interesting to note that this is the first case where a court imposed a divestiture remedy as a result of a private litigation,[39] given that remedial actions are generally imposed by the competition agencies in a public enforcement context.

Box 3.5. Divestment by Jeld-Wen Inc. of Craftsman Manufacturing Inc in the US

In 2012, Jelden-Wen Inc completed the acquisition of Craftsman Manufacturing Inc. The market affected by the merger was the market for door skins in the United States, which, prior to the transaction, included three main players, all of them vertically integrated.

The transaction was notified to the Department of Justice, who decided not to pursue it at the time of the notification, and also not when Steves, a door manufacturer, filed a complaint in 2015. Steves filed suit in the US Federal District Court for the Eastern District of Virginia, alleging breach of Section 7 of the Clayton Act. In 2018 the District Court declared the infringement of Section 7 and ruled in favour of the divestitures of the integrated company's assets to a third party (McDonald et al., 2018[63]). In 2021, the US Court of Appeals for the Fourth Circuit upheld the decision, and, having analysed the following factors, concluded that the structural remedy was the only appropriate one:

- The merger created an irreparable antitrust injury and other remedies such as monetary damages would be inadequate to compensate for such damage (by analysing a threat to collapse its main client downstream, Steves);
- Any behavioural remedy would only protect competition temporarily;
- In the absence of the divestiture remedy competition was under threat, whereas following a divestiture, the unbalance created between the merged company and its competitors would become speculative; and,
- Because the merger resulted in a duopoly that allowed the merged entity to use its market power to threaten independent manufacturers' survival, the public interest would not be disserved by the *ex post* break-up of the merged entity.

Source: (Herbert Smith Freehills, 2021[64])

63. Even though the US is the jurisdiction with most experience on imposing structural remedies in consummated mergers, other jurisdictions have interesting experiences. The Stericycle/Ecowaste merger prohibition in the United Kingdom by the Competition Commission (now CMA) included structural remedies in the form of the divestiture of the acquired assets (see Box 3.6). In its decision, the Competition Commission clarified the considerations on which assets should be included in the remedy package to ensure effectiveness of the intervention, as well as the proportionality of the divestiture to the concerns in the case.

Box 3.6. Remedy package design on the Stericycle/Ecowaste merger in the UK

In January 2011, Stericycle Inc., through its subsidiary SRCL Limited, acquired the entire capital of Ecowaste Southwest Limited, including the company's facility in Avonmouth, customer contracts, licences, collection vehicles and other assets (Competition Commission, 2012[65]). Both companies provided services in the area of Avenmouth[1] for the collection, transport, treatment and disposal of healthcare waste. In the market, companies that provide similar services were either vertically integrated or collection-only ones that subcontracted treatment services.

In August 2011, the Office of Fair Trading (OFT) referred the acquisition to the Competition Commission (CC) for its investigation and report. On December 2012, the CC published a final report concluding that the merger would give rise to a substantial lessening of competition in the market and requiring Stericycle to divest the acquired business to a suitable purchaser.

The CC assessed two alternative remedies proposed by SRCL. The first one aimed at providing access to capacity at Ecowaste Southwest to compensate for the annual throughput of the Avonmouth plant prior to the transaction, in addittion to a transfer of one key contract to a purchaser to give it a base to build its market presence. The second proposal included the divestment of some of the assets acquired, such as the Avonmouth plant and two key long-term, customer contracts. The CC, however, took the view that a complete divestment of Ecowaste Southwest, including the Avonmouth plant and all customer contracts, was the only effective and comprehensive remedy for dealing with the adverse effects of the merger.

In the design of the divestiture package, the key considerations were:

- The need for strong customer relationships (hence, the inclusion of all the long-term contracts),
- The minimum capacity utilization needed to generate profits and efficiencies in the treatment plants,
- The staff needed to help safeguard the viability of the business, and
- The ability to find an appropriate purchaser.

A non-compete agreement between SRCL and Ecowaste Southwest for a short period after the divestment was also considered necessary to ensure the successful establishment of the new owners of the assets.

Note:
1 This area includes the city of Bristol, Bath and North East Somerset, North Somerset and South Gloucestershire.

64. These cases provide useful examples for competition authorities on how to design remedy packages in consummated mergers. They could even serve as a basis for the assessment of cases where it is not appropriate to impose divestitures, but to rely on other tools such as behavioural remedies, as it would be analysed in section 3.2.5. In sum, these experiences show that imposing structural remedies in consummated remedies, although challenging, is possible and occur with success, and point out that costs and risks that come with *ex post* structural remedies can be limited if they are imposed as closely as possible to the implementation of the merger, while increasing the effectiveness of the intervention.

65. In the following section, we will analyse three questions, which are key for competition authorities when designing remedies for consummated mergers:

1. What is the relevant moment in time for the analysis of the effects of the consummated merger and, therefore, the relevant market context for designing effective remedies (section 3.2.3)
2. What challenges do competition authorities face when designing structural remedies to restore the market structure existing prior to the merger? In other words, how feasible it is to unwind the merger, or "unscramble the eggs" (section 3.2.4)
3. Should the approach to behavioural remedies be different in an *ex post* context as opposed to an *ex ante* merger review (section 3.2.5)

3.2.3. The relevant moment in time for the review of the merger and the design of the remedy

66. A key question that arises when assessing proportionality of a potential remedy in consummated mergers is the moment in time that is relevant for the review of the effects of a transaction on the market conditions. This issue is specific to *ex post* reviews since in an *ex ante* context the authority cannot but assess the effects of the merger that are foreseeable at the moment of the closing. In an *ex post* context, however, there are two possible points in time for such analysis: the time of the closing of the transaction and the time of the opening of the *ex post* investigation (See Box 3.7 and Box 3.8). These two points in time can be quite distant from each other, sometimes even multiple years. The longer the interval between these two points in time, the higher the probability that the competition analysis can be very different (as market conditions might have changed significantly over time and irrespectively of the merger). This may have an impact not only on the assessment of the effects of the merger on the market, but also on what remedy the authority could or should adopt.

67. If the review focuses on the effects that the transaction had in the market when it was consummated, the remedy(ies) ought to be geared much more towards unwinding the consummated merger to recreate the market conditions existing prior to the merger closing. As it will be discussed later, this might prove challenging especially if the *ex post* merger investigation was opened long after the assets of the merging firms went through a process of integration of their assets. If, on the other hand, the authority has to consider if the consummated merger led to a restriction of competition at the time of the review, then the remedy(ies) ought to be geared more towards re-establishing an equivalent degree of competition at the time of the investigation. This makes the design of effective remedies less dependent on the ability of the authority to "unscramble the eggs", as the expression goes.

Box 3.7. US v. E.I. du Pont de Nemours & Co.

In the United States, the question of the appropriate moment in time that the authorities need to consider when challenging a consummated merger has been an issue of debate for a long time. Since 1956, when the US Supreme court decided on the United States v. E.I. du Pont de Nemours & Co case ("du Pont case"),[1] the US agencies can rely upon the market conditions at the time of the challenge of the transaction rather than at the time of its consummation. This means that a transaction that did not raise competitive concerns at the time of its consummation could nevertheless be challenged later if, at some point in time, it raises a competitive concern and if such effects appear to be the result of the transaction. In practical terms, the US agencies can bring suit under Section 7 of the Clayton any time they believe a merger may cause a substantial lessening of competition.

The decision in Du Pont was followed by an intense debate as to the risk that the position taken by the US Supreme Court would have on the incentives of firms to merge. Critics of the judgement argued that prospective merging parties might be discouraged to enter into efficiency-enhancing mergers by the threat of future enforcement actions based on future market situations to which the merger may have contributed but that were unpredictable at the time of the merger (Broomley, 1958[66]). This was the position that Justice Brennan argued in his dissenting opinion in Du Pont, where he called upon "elementary principles of fairness" to submit that acquisitions which were legal at the moment of the stock acquisition should not be challenged later in time because of unforeseen future developments.

Notes:
[1] United States v. E. I. du Pont de Nemours & Co., 351 U.S. 377 (1956)

68. One of the issues that comes with reviewing the competitive environment when the merger is being challenged is that the causal link between the concerns and the transaction might be loose or even absent, and the uncertainty of whether exogenous dynamics had any role in the anti-competitive effects is high. The increase in market power of the merged entity might depend on many other factors, such as subsequent entry or exit, changes in the consumers' preferences and demand, or others factors that are unrelated to the transaction (Sher, 2004, p. 64[14]). Even when the authority could establish a link with the consummated transaction, uncertainty would remain on whether the effects observed in the market are the result of the merged entity's conduct post-closing, which should be scrutinised under the antitrust rules, rather than the direct consequence of the structural change brought about by the consummated transaction (ABA Antitrust Law Section, 2020[10]).

Box 3.8. The relevant moment in time for the analysis in other jurisdictions

What the relevant time frame for the review of a consummated merger is in other jurisdictions is not clearly established, as authorities have relied on different approaches, with some following the US on analysing the market at the time when the transaction is being challenged, while others are more inclined to look back to the moment when the transaction was completed.

Mexico has investigated very few merger cases after the consummation of the transaction. One of them concerned a merger in the market of production and selling of tequila.[1] The investigation was opened six months after the completion of the transaction which the parties failed to notify on time. In addition to a sanction for gun jumping, the Commission ordered the merged firms to return to the original state prior to the transaction, including the divestiture of all the assets, shares and stocks. The authority reached its conclusion based on the change of competitive conditions in the market following the consummation of the transaction.

Chile introduced mandatory merger control in 2016. Under the new regime, the Fiscalía Nacional Económica (FNE) has the power to investigate non-notifiable mergers that, after being consummated, caused anti-competitive effects in the market.[2] In practice, these powers have only been used once, in 2021, when the FNE challenged the 2018 acquisition of Naviera GyT S.A. assets by the Navimag Carga S.A. before the Tribunal. In addition to a fine, the FNE requested the imposition of behavioural remedies.[3] In this case, the authority analysed the market structure pre and post transaction, including the effects on prices, quality of the services offered up until the moment of the challenge of the merger. It argued that until the day of the suit, the merged entity maintained a monopoly in the market with increased prices and lower supply of the service and thus, concluded that remedies to guarantee lower prices and an increase of supply were needed (FNE, 2021[67]).

In **Brazil**, in the Nestle/Garoto case, discussed in Box 3.10, CADE followed a similar approach to the Chilean case. In Nestle/Garoto, the re-assessment of the case by the Authority relied on the market dynamics post-merger, showing that the design of the remedies was also adjusted to the development in the market at the moment of the authority's assessment rather than when the merger was completed.

The question of the appropriate time for the analysis and consequent remedy becomes less important if the investigation is opened soon after the completion of the transaction. In many instances, the intervention by the authority takes place right before the parties actually merge their assets. This is the case of **Canada**, given its time limits to investigate mergers that were non-notifiable (up to 1 year). The Competition Bureau has reviewed different cases in the past years and all of them were not consummated at the time of the analysis.[4] An analogous situation occurs in the **UK** as the CMA can intervene within four months from the completion of the transaction, meaning that the analysis is mostly done on a predictive basis as it is with pre-merger reviews.

Notes:
1 Case CNT-085-99.
2 Under Article No. 3 of Decree Law 211 of 2016.
3 The remedies requested included the implementation of fair pricing schemes, increase of supply, objective criteria to increase certainty with respect to supply and availability of the service, and prohibition to sign contracts that could affect significantly the availability of the service.
4 For example Evonik/PeroxyChem, Dow/DuPont, Iron Mountain/Recall, and Tervita/Complete.

69. From this discussion it appears clearly that the passage of time between the closing of the transaction and the *ex post* review is crucial for the design of the remedies and, ultimately, for the effectiveness of the authority's intervention in re-establishing competitive conditions. Designing remedies to restore competition to the levels existing prior the transaction can be easier said than done especially if the investigation is opened a long period of time after the closing. The authority will need to give due considerations to the product developments, investments and innovations that have occurred in the market in the meantime and to the resources that the merging parties have devoted to the integration of the merging parties' assets in the new entity. In markets where the levels of technology are high, the pace of innovation fast, products develop very rapidly and new markets emerge, this might pose serious challenges for authorities. Even one year after the consummation of the transaction, the products or assets of the acquired firm may become obsolete or may have being deployed to the production of other goods or services entirely (Sher, 2004, p. 91[14]).

3.2.4. The use of structural remedies in an ex post merger review context

70. One of the arguments on which the opponents[40] of the use of *ex post* merger review powers by competition authorities rely on is that there are no effective remedial actions available to the competition authority to restore competition. This argument rests on the assumption that once the assets of the merging firm (physical, human and financial) have gone through a process of integration creating a new entity, it is very difficult and costly to undo the integration process and separate them back, or even counterproductive. Some assets may have been dismissed in the process, others may have been diverted to other uses, and, over time, it might not even be possible anymore to distinguish the original assets of the buyer from those of the target.

71. The chances that the authority can "unscramble the eggs" might prove impractical, very costly, or even impossible where significant productive assets of the merging party have already been irreversibly combined (e.g. factory closures and R&D centres closures as shedding of duplicative manufacturing capabilities, combination of real state, among others).[41] In other words, it might not be possible to disentangle the merger; and even if that were possible, the benefits from doing so might not compensate for the loss of efficiencies, the lengthy regulatory procedures and the possible costly litigation that come with this process. This is for example the case in the so-called "killer acquisitions" whose rationale is to dismiss the target's assets and products; or in so-called "reversed killer acquisitions", whose business rationale is for the buyer to terminate its own assets and products and replace them with those of the target (OECD, 2020, p. 47[4]).

72. Some of the legitimate concerns in *ex post* review could be alleviated if antitrust intervention occurs at a point in time when integration of the merging firms' businesses is not yet completed or it is only partially completed (see, for example, Box 3.9). In this case, competition authorities can order interim measures to prevent that the integration of the businesses might affect the effectiveness of the authority assessment of the transaction and, especially, of the implementation of the most effective remedy package that the authority will require (see (OECD, 2022[68]) and (OECD, 2014, p. 20[1])).[42] If the merger has already been completed, disentangling the merged assets might become a hard task, with increasing difficulty as time passes and markets evolve. In this scenario, interim measures could still be considered and would normally be addressed to the buyer and aim at prohibiting any further activity towards the integration of the target's business, without the prior consent of the competition authority.

Box 3.9. The use of Interim Measures and the Facebook/GIPHY Merger in the UK

In May 2020, Facebook completed its acquisition of GIPHY, the world's leading provider of free GIFs and GIF stickers. Less than a month later, the UK Competition and Markets Authority (CMA) required the merging parties to hold the businesses separate, imposing an Initial Enforcement Order considering that the merger could potentially result in a substantial lessening of competition in social media and display advertising markets in the UK. Two theories of harm were analysed by the CMA: horizontal unilateral effects resulting in the loss of potential competition in display advertising and vertical effects on competition in the supply of social media, arising from potential input foreclosure regarding access to GIPHY libraries. In November 2021, the CMA's final report concluded that the transaction had the potential to lessen competition in the market (CMA, 2021[69]).

While Facebook proposed behavioural remedies that aimed at guaranteeing open access to the library, the CMA believed that given the nature of the market, behavioural remedies would not provide an effective and comprehensive solution and that the only effective way to address the competition issues identified was for Facebook to sell GIPHY in its entirety. In addition, the CMA flagged the risks of Facebook circumventing the obligations and the difficulties with the monitoring and enforcing the behavioural remedy.

73. Commentators have also pointed to the regulatory costs that businesses incur when implementing structural remedies for a consummated merger, given the impact that this process has on resources involved with lengthy and uncertain investigations, as well as the direct costs for companies to engage in the divestiture process itself (Givensky, 2013, pp. 94-95[15]). A recurring argument against structural remedies for consummated mergers is the incremental cost of an *ex post* break-up, which is often considered prohibitive, and therefore a reason to avoid breaking up merged firms. A commonly used argument is that unwinding transactions would create inefficiencies and costs in the market, without certainty that the divested assets would transition to a third party that could successfully maintain a sufficiently competitive position in the market. [43]

74. In the next sections, we will discuss these arguments in more detail based on experiences with structural separation in other contexts. In particular, we will review scenarios where structural remedies and companies break-up proved feasible:

- When the transaction took place, but the assets of the merging parties were not fully integrated yet;
- Self-initiated, private break-up processes that have proven to be effective and have increased companies' market value;
- Successful break-ups of companies in other enforcement areas; and
- Break-ups in regulated industries.

The assets are not fully integrated and "fault lines" are easily identifiable

75. In some cases, although the transaction is already agreed and legally concluded, the merging parties have not yet integrated their business and their assets are not yet partly or fully integrated.[44] This happens particularly when the enforcement action takes place very soon after the consummation of the merger (see for example Box 3.10) or when the

rationale of the merger was to maintain the assets of the target separate from those of the buyer or not to fully integrate them in the first place. This could also be the case with respect to vertical mergers or a merger of complementary businesses rather than mergers between horizontal competitors. In such cases, unwinding the operation might prove simpler for the authority since the two businesses are visibly separate along so called "fault lines" and the implementation of a structural remedy can be more straightforward (Kwoka and Valletti, 2021, p. 1292[8]).[45]

Box 3.10. Nestlé/Garoto merger in Brazil

In 2002, Nestlé purchased the chocolate maker company Garoto and two years later, the Brazilian competition authority (CADE) suspended the operation before Nestlé could integrate Garoto's assets, given potential anti-competitive concerns in the domestic chocolate market. In its decision, CADE rejected a proposal of the merging parties to divest assets in the segments of chocolate coverings and other chocolates in all shapes, which were highly concentrated and prohibited the sale of the assets to the major competitor (Lacta from Mondelez Group) (CADE, 2016, p. 9[70]).

Thus, since 2004, Nestlé owned Garoto, but operated it separately in terms of manufacturing and administration of the business. CADE intervention took place under the old Brazilian merger regime, which was *ex post* notification system[1] By that time, Nestlé had a market share of approximately 34% of the market, which would have increased to 58% with the purchase of Garoto. The main competitor had a market share of 33%.

On appeal, the case was sent back on procedural grounds to CADE to take a new decision. In 2016, during CADE's second assessment of the transaction, the authority accepted a proposed offer by Nestlé to address the authority's concerns, arguing that the market had changed drastically and, therefore, the first decision was outdated. The remedies package was confidential to assure viability of its implementation, but included the divestiture of brands that belonged to Garoto, as well as additional behavioural remedies (CADE, 2016[71]). CADE concluded that the remedies were adequate considering the market structure at the time where they were proposed (not at the time the merger was consummated) (CADE, 2016, p. 9[70]).

Note:
[1] Law No. 12 529 of 2011 entered into force in 2012 as the New Competition Law in Brazil. Among the several changes brought by the new Law, the main was the adoption of a pre-merger review system, which incorporated a suspensory obligation prior to closing.

Self-initiated private break-ups

76. Firms routinely engage in self-initiated restructuring, which may also include break-up processes whose purpose is to increase the market value of existing assets. Evidence suggests that close to one-third of mergers and acquisitions or reorganizations involve some form of divestitures (Van Loo, 2020, p. 4[72]). A study of 40 private break-ups that were all initiated to increase the market value of the companies, in the period 2001 to 2010, concluded that at least one third of the transactions generated assets values exceeding the pre-separation value by more than 50% (Bain & Company, 2014[73]) (see Box 3.11).

Box 3.11. Bain & Company study on success factors for private break-ups

In a study of 40 companies' break-ups privately initiated between 2001 and 2010 to increase the corporate market value, Bain & Company analysed the increasing trend of divestitures and spin-offs coming from private initiatives with the objective to determine if the benefits of engaging in these private restructuring outweigh their cost, i.e. how often such break-ups are worth the effort (Bain & Company, 2014[73]).

Among the factors that firms consider when taking the decision of spinning off parts of their business, the study highlights that transaction costs are not significant in monetary terms, as they could go up to 1% of the consolidated revenue, and in length, as the time between the decision to break up part of the company and the closing of the transaction, is close to only 12 months. The study concludes that while the spun-off entity often generates positive returns, the new companies typically required between 12 to 18 months to unlock the value of the separation and performance varies significantly across the cases. In general, one-third of the separations generated new businesses values exceeding their pre-separation value by more than 50% but in another third, the combined market cap of the new companies 18 months after separation was 40% lower than their pre-spin value.

The study identified some essential factors that contribute to a successful break-up. These included:

- the assessment of the rationale for separating, including potential opportunities to perform better in the market independently;
- the definition of the changes that will ensure that both companies stay competitive in their future markets; and
- a plan to offset the costs that result from the loss of economies of scale, including the duplication of the management teams, IT services and other shared activities.

On the one hand, the rationale of break-ups is to allow one or both businesses to be better positioned in the market, through gaining access to new markets, reducing costs or making strategic investments. On the other hand, some dis-synergies could be generated and they could increase with how integrated the activities were before separation. The study identifies a raise by 5% on administrative costs during the first year of separation. However, those new costs could be fully offset 12 to 24 months after separation if the process is successful.

The study concludes that, when break-ups make business sense, they are well-structured and accompanied by programmes to effectively implement the separation, they could lead to profits and to generation of corporate value for shareholders.

Source: (Bain & Company, 2014[73])

77. It is possible to conclude from these studies that structural break-ups are not necessarily too costly or unfeasible and that authorities should not be discouraged from imposing structural separation remedies in *ex post* merger reviews simply based on such arguments (see Box 3.12). However, one must also stress that there are differences between private break-ups and break-ups that result from a decision of a competition authority. A first but very important distinction concerns the objectives of private break-ups as opposed to divestitures in merger remedies: merger remedies aim at reducing market concentration and potentially addressing excessive market power, while private break-ups aim merely at

increasing private profits. A second important distinction refers to the type of transactions that are most often the object of divestitures: while in merger decisions structural remedies are mostly used to address horizontal competition concerns, private break-ups are mostly used in vertical or in conglomerate restructurings (Van Loo, 2020, p. 21[72]).

Box 3.12. Some examples on successful, self-initiated private break-ups

Examples of recent private break-ups by companies include Fox's sale of 20th Century Fox Production, which was subsequently acquired by Disney; eBay spinoff of PayPal and the split by Hewlett Packard into two companies as part of a restructuring plan.

In 2018, the Department of Justice of the United States cleared the acquisition of 20th Century Fox Production by Disney after requiring the sale of the Fox Sports Regional Networks. Fox Corporation (also known as the New Fox) was formed in 2017 as a preparation for the transaction, when the assets that were not going to be acquired by Disney were spun off from 21st Century Fox. The New Fox was created to be able to have a strong financial profile and to be positioned to continue to growth and draw upon the live news and sports businesses of Fox, as well as the Broadcast Network (The Walt Disney Company, 2018[74]).

Similarly, in June 2015, eBay Inc. announced eBay and PayPal separation into independent publicly traded companies (eBay Inc., 2015[75]). The reasons given by the companies for the transaction included sharper focus and greater flexibility to pursue future success in their respective markets, meaning that incentives to break up indeed can relate to creation of value and efficiencies for both units separately.

Finally, in November 2015, Hewlett Packard Inc. split into two separate entities: HP, focusing on consumer-facing computer and printer businesses and HPE, focusing on the enterprise-facing hardware and cloud businesses. *Ex post* studies have shown that after the separation, both entities engaged in restructuring initiatives and commercial, costs reduction efforts, key product innovations and strategic acquisitions, showing that the split allowed them for a customised approach of the businesses which impacted positively their performance in the respective markets (Nasdaq, 2017[76]).

Break-ups and structural remedies in non-merger cases

78. Merger control is not the only competition enforcement area where competition authorities can impose structural remedies. Some jurisdictions, but not all, can impose structural remedies in two instances: when closing a market investigation or when remedying the consequences of an abuse of dominance / monopolisation case (OECD, 2019[77]) (see chapter 2.3). Experiences from these non-merger enforcement areas are also illustrative of the feasibility of structural remedies (Kwoka and Valletti, 2021, p. 1293[8]).

79. The adoption of structural remedies by competition authorities in ***abuse of dominance cases*** is rare. Only some jurisdictions have such powers and those who have them apply them in last-resort cases (see, for example, Box 3.13). This is because the main purpose of structural remedies in abuse cases is to correct past abusive conduct and to prevent similar future conduct, and not to eliminate the dominant position of the firm under investigation. This is in sharp contrast with the use of structural remedies in the context of merger control, which are normally seen as a way to prevent the merger from creating or strengthening market power in the future by preserving a competitive market structure.

Box 3.13. The application of structural remedies in the EU under Regulation 1/2003

EU Council Regulation 1/2003 allows the European Commission to impose structural remedies as a consequence of a competition law infringement. Article 7 of the regulation establishes that the Commission may impose on firms that infringe Articles 101 and 102 structural remedies which are proportionate to the infringement committed and necessary to bring the infringement to an end, and where there is no equally effective behavioural remedy or where any equally effective behavioural remedy would be more burdensome for the undertaking concerned than the structural remedy.

Recital 12 of the Regulation adds that "[c]*hanges to the structure of an undertaking as it existed before the infringement was committed would only be proportionate where there is a substantial risk of a lasting or repeated infringement that derives from the very structure of the undertaking*".

It follows from the applicable provisions and EU case-law that the following principles governing the European Commission's powers to impose remedies prevent the EU executive from engaging in what has been dubbed "discretionary remedialism". These principles are:

- **Necessity**: there must be a direct link between the infringement and the remedy. The remedy must put an end to the anti-competitive conduct and prevent it from reoccurring – without pursuing further objectives. The necessity requirement has been defined as a filter that determines that "*the remedy is generally capable of bringing the infringement to an end, does not go beyond this goal and does not concern aspects that are not part of the procedure*". The Court of Justice of the European Union has further noted that the Commission may not only act to put an end to infringements, but also to remedy their continuing effects, i.e. the consequences that may continue to have a negative effect on competition despite the fact that the originating conduct has ceased.
- **Rights of defence**: in order to impose a remedy, the Commission must build a case, i.e. a theory of harm, explaining how the remedy is an adequate response to the infringement – for instance, the remedy cannot address competition concerns not identified in the decision (in practice, the application of this principle constrains the Commission in a way similar to that of the necessity requirement). The remedy cannot address potential violations or conduct whose effects remain unidentified.
- **Proportionality and indispensability**: the remedy must not exceed what is necessary to restore competition, or the possibility for competition, in the market.
- **Equal treatment**: similar cases may not be treated differently and different cases may not be treated similarly, unless there are specific reasons for this. This principle is of particular relevance in the case of access or supply remedies.

To date, the European Commission has not imposed structural remedies under Art. 7 of Regulation 1/2003.

Sources: (OECD, 2019[77]) and (Maier-Rigaud, 2016[78]).

80. Other jurisdictions that can impose structural remedies in antitrust investigations are the United States, Canada and Singapore. In the US, agencies can use of structural remedies in Section 2 cases of the Sherman Act infringements (i.e. monopolization and attempted monopolization). According to the Department of Justice, structural remedies

may be appropriate if a Section 2 violation has a clear, significant causal connection to a defendant's acquisition of monopoly power and when there has been a determination that alternative remedies would not achieve the remedial goals satisfactorily (US Department of Justice, 2009[79]) (see Box 3.14). In Canada, the Competition Bureau is also authorised to seek for structural remedies in abuse of dominance cases under section 79(2) of the Competition Act. However, until today, no divestiture has ever been ordered under Section 79, and the Bureau has relied on sanctions and behavioural remedies that involve, mostly, an order prohibiting the continuation of a practice of anti-competitive acts.[46] Similarly in Singapore, the Singapore Competition Act grants general powers to the Competition Commission (CCS) to take remedial actions to preserve competition, and the CCS Guidelines on Enforcement emphasise on the possibility for the authority to bring an infringement to an end by giving directions or requiring an undertaking to make structural changes to its business (CCS, 2016[80]).

Box 3.14. The use of structural remedies in Section 2 cases of the Sherman Act

In the United States, courts have been reluctant to order divestitures in monopolisation cases, contrary to their attitude with regard to merger cases (Waller, 2003[81]). The US Supreme Court, however, ordered a divestiture in order to create competition in a market in the 1972 Otter Tail case, where an electrical transmission company was required to sell power to public municipal electrical distribution companies. In the Alcoa case, a declared monopolist was also accused of other competition violations. After long standing litigation, the US Congress stepped in and ordered the divestiture of some of Alcoa's businesses, which was followed up later by Court and legally ordered divestitures (Waller, 2007[82]).

The separation of AT&T in the United States further exemplifies the use of structural separation in the context of competition law enforcement. In the 1974 the Department of Justice (DOJ) filed an antitrust suit against the American Telephone & Telegraph (AT&T) for monopolisation in the telecommunication market. The incumbent was accused, among other things, of monopolising the telephone equipment manufacturing and long distance telecommunications service markets. According to the DOJ, AT&T was the monopolist for local and long distance telephone services and failed to connect competing carriers with its network on reasonable terms and of reducing its prices only in the markets where it faced competition. Furthermore, the company's subsidiary, Western Electric, was the main producer of telephone equipment. The investigation was then led by the DOJ, which requested the full ownership separation of AT&T and Western Electric and the divesture of AT&T from Bell Operating Companies (BOCs) which offered local and regional services.

In January 1982 the parties reached a settlement agreement. The structural part of the remedy was a vertical divestiture, with AT&T divesting its local service providers (BOCs) with the creation of seven regional operating companies (RBOCs). With this agreement, the incumbent kept its long distance services, the equipment manufacturing (Western Electric) and the research division. AT&T was also obliged to transfer enough assets to allow RBOCs to operate, including – on a royalty fee basis – all existing patents and all those issued for the next five years. The requirement was not only concerning AT&T, in fact the agreement imposed the court's approval before RBOCs could expand the scope of their business. They were also obliged to non-discriminate the access to their local exchange networks.

It is important to note that at the time AT&T was the largest corporation of the world and the break-up raised various critiques such as the decline of the quality, the risk to national security, and shareholders' interests being negatively affected. In practical terms, the divestiture was easier than planned, mostly because the BOCs were already organised in a way that made it fairly easy to spin them off as independent companies. Even shareholders did not suffer the loss predicted by the critics to the spin off. Moreover, AT&T's structure was already the result of a regulatory process and not the outcome of market's dynamics.

The divesture of AT&T raised a debate within the antitrust world; while several critiques were made of the decisions, some observers consider this divesture as a success, highlighting the effects on prices and technology developments (For instance, see (Cavanagh, 2005, pp. 202-203[83]) and (Sullivan, 2001[84])). As always, the absence of a counter scenario cannot confirm this last point.

Source: (OECD, 2019[77])

81. Antitrust investigations are not the only enforcement area beyond merger control where remedies can be imposed by a competition authority. Some competition authorities can impose remedies, including structural remedies, in the context of ***market investigations*** when they conclude that structural issues have a negative impact on the efficient functioning of a market.[47] In the United Kingdom, for example, the competition authority, under Section 131 of the Enterprise Act 2002, can start a market investigation to determine whether any feature or combination of features in the relevant markets might result in anti-competitive effects. In this case, the CMA is required, under Section 134 of the Enterprise Act 2002, to decide what the most appropriate action to remedy is, mitigate or prevent such detrimental effects on consumers (see Box 3.15).

82. According to the CMA Guidelines for Market Investigations, the choice of remedy depends on the case at hand and requires consideration of whether remedial action is necessary, effective and proportional. Other considerations for the design and implementation of remedies in market investigations include the assessment of relevant customer benefits, the time scale of the effects of the remedy, regulatory provisions and how it will interact with other remedial measures in the same sector (CMA, 2013[85]). In recent years, many sectors have seen the imposition of both, structural and behavioural remedies. Examples include retail banking, groceries market, payment protection insurance, airports, and energy, among others (OECD, 2020[86]).

Box 3.15. Structural remedies in the BAA Airports Market Investigation in the UK

In 2009, the former Competition Commission (CC) (now merged into the CMA) launched a market investigation to study the supply of airport services by the British Airports Authority – BAA (CMA, 2016[87]). In this study, the Authority found that BAA ownership of several UK airports, that accounted for over 60% of all passengers in the UK, together with some features of such market[1], gave rise to adverse effects on competition in the supply of airport services.

With regard to the common ownership, the CC found that: (i) it prevented competition between the airports in Edinburgh and Glasgow; and (ii) it prevented competition between the three airports in London, which increased with capacity constraints and price controls existent at the time in the market.

As a result of the market investigation, the CC imposed a package of remedies to solve the anti-competitive concerns identified that included divestitures of three airports[2], as well as behavioural considerations[3] to guarantee its success in restoring competition in the market. The remedy package also included recommendations to the Department of Transport in relation to economic regulation of airports, particularly, with respect to implementing a licensing regime with different obligations for airports of different sizes and market power, as this would introduce more flexibility in the regulation and allow for more competition.

Notes:
[1] Some of the features included aspects of the planning system and government policy that have acted as barriers to entry and expansion, as well as the regulatory system for airports in place, as well as the position of the Heathrow Airport as the only significant hub in the UK and the isolated geographical position of Aberdeen Airport.
[2] Standsted Airport, Gatwick Airport (each to a different purchaser) and either Edinburgh or Glasgow Airport.
[3] Behavioural remedies included the strengthening of consultation procedures on quality of service at Heathrow, expecting the introduction of a new regulatory systems, and reports of information on capital expenditure, as well as consultation with stakeholders, at Aberdeen Airport.

83. Strategies to easier and better implement structural remedies, as well as behavioural ones when needed, learnt from their imposition in different scenarios could also be of help when designing remedies for consummated mergers. For example, the use of *trustees* or third parties to break up businesses or separate business units to comply with structural remedies in pre-merger regimes has been successful and makes structural remedies easier to implement. As competition authorities benefit from the use of trustees to oversee a divestiture process in *ex ante* merger review, the same can apply to consummated mergers. Trustees have specialised expertise and they could help lessen the burden on the authority to monitor the divestiture process, while reducing risks of decrease in the competitiveness of the selling assets and therefore the effectiveness of the remedy (ICN, 2016, pp. 24-25[39]).

84. The case illustrated in Box 3.15, is an example of the importance of the role a *trustee* could have during the implementation of structural remedies. Particularly, the Competition and Markets Authority identified that a *trustee* is crucial for rigorous, ongoing monitoring (CMA, 2019, p. 19[88]), for example to ensure the winning bidder would be in a position to operate the acquired assets successfully, while ensuring a smooth divestment process (CMA, 2016, p. 18[87]).

85. From the analysis of remedies for abuses of dominance cases or in market investigations it is possible to draw a few lessons. First, that structural remedies may prove

an effective remedy to address competitive concerns particularly in vertically integrated firms (OECD, 2016[89]). The ACCC, for instance, has stated clear preference for structural separation rather than behavioural remedies in vertical cases.[48] This preference could also apply for consummated mergers, as "fault lines" are clearer in such scenarios, as discussed above. Moreover, it can be seen that scenarios where concerns come from common ownership or when joint ventures are involved, lend themselves particularly to the use of structural remedies, as they can be simply a divestiture of shares. Finally, there are sectors where structural remedies are more likely to be successful. Some examples are network industries and sectors which have undergone a privatisation process, and utility sectors which are often regulated (Alexiadis and E., 2013[90]).

Experiences with break-ups and structural separation in regulated industries

86. In many network industries such as electricity, telecommunications and railways, where parts of the value chain exhibit economies of scale and, therefore, tend to be viewed as natural monopolies, regulators have promoted different levels of separation. The objective pursued by structural separation in regulated industries is to preserve the regulated monopoly but ensure competition in other parts of the value chain so as not to eliminate efficiencies. Separation may take different forms: it may involve only accounting or functional (operational) independence or may imply structural break-ups to guarantee a permanent change in the competitive structure of the sector.[49]

87. The 2001 OECD Recommendation Concerning Structural Separation in Regulated Industries (OECD, 2001[91]), together with the reports monitoring its implementation, have concluded that structural separation remains a relevant remedy in vertically integrated industries where only some activities are subject to competitive constraints (OECD, 2016, p. 5[89]).

Box 3.16. OECD Recommendation Concerning Structural Separation in Regulated Industries

The 2001 OECD Recommendation Concerning Structural Separation in Regulated Industries recommends Adherents to consider the benefits and costs of structural separation when regulated firms have activities that are potentially competitive and linked to non-competitive activities, such as natural monopoly activities (OECD, 2001[91]).

After its implementation, the OECD has conducted multiple reviews of international experiences with structural separation in regulated industries, which triggered a modification of the Recommendation in 2011 to ensure the consideration of potential impacts on investment when analysing a structural separation.

The latest monitoring report of the implementation of the Recommendation was issued in 2016 (OECD, 2016[89]). It concluded that structural separation remains a relevant remedy to advance the process of market liberalisation and highlights the existence of other areas of application such as vertically integrated industries, being this conclusion the source of its latest amendment.

The Recommendation states that the benefits and costs to be balanced include the effects on competition, effects on the quality and cost of regulation, effects on corporate incentives to invest, the transition costs of structural modifications and the economic and public benefits of vertical integration, based on the economic characteristics of the industry in the country under review.

88. The policy reasons for structural separations in regulated industries are the most diverse and differ from those which drive structural remedies in consummated mergers. Regulators have imposed separations to eliminate conflicts of interest, to promote diversity, to guarantee coverage and quality, as well as to prevent excessive concentration of market power or the transfer of dominance form one market to another. Examples of sectors which experienced structural separation are often in utilities industries,[50] postal services, ports, banking, transportation[51] and payment systems (OECD, 2019[77]). The success of such remedies in regulated industries depends heavily on factors such as the extent of the separation (total or functional); the timing of its implementation; the assessment of whether structural remedies are accompanied by behavioural measures, such as commitment to grant equal access on equal terms; and the periodic review of the remedy package to ensure that it is still addressing an underlying concern (Khan, 2019, p. 1052[42]). International experience in imposing divestitures in regulated industries shows how structural orders constitute a powerful tool that regulators and governments rely on to improve competition in markets and correct existing market failures.

Box 3.17. Structural separations in telecommunications

The largest break-up of a telecom company took place in US in 1984, when to US courts ordered the break up AT&T regulated monopoly,[1] and split the AT&T long-distance phone network into seven regional companies (the Bell Operating Companies) each in charge of providing local and intra-region services (see Box 3.14) (Swanson, 2014[92]). Following the example of the AT&T break-up, other jurisdictions have engaged in separation of telecom activities and related assets supplying different telecommunications services:[2]

- In 1997, Brazil separated its telecommunication company into several regional companies and a long-distance one during the privatization process established by the Telecommunications General Act[3];
- Japan followed a similar process in 1999, when the main national communications provider was split into smaller regional companies (Asai, 2006, p. 24[93]);
- In 2012, Australia addressed its concerns that vertically integrated Telstra was holding back competition in the industry by accepting Telstra's Structural Separation Undertaking, whereby the company proposed to structurally separate by 2020 the retail and wholesale businesses and to cease to supply fixed-line voice and broadband services over copper and HFC networks, as they roll out NBN fibre;[4]
- Mexico recently imposed obligations for the structural separation of América Móvil, which was declared a preponderant operator in the telecommunications sector since 2014;[5] in particular, IFT ordered the structural separation of infrastructure services upstream in the fixed services segment (Telnor) from the downstream services (Telmex) by March 2020.[6]

Even though these break-ups may differ in scope, from accounting separation to functional separation or structural separation, they normally aim at addressing inefficiencies inherent to existing monopolistic structures (Grundin et al., 2020[94]), allowing the government to promote more effective competition and innovation through the industry value chain.

Notes:

[1] In 1913, the American Telephone and Telegraph Company (AT&T) settled with the Department of Justice in an antitrust challenge against the company, agreeing to divest Western Union telegraph company and to allow telephone companies to interconnect with AT&T long-distance network.

[2] For a comprehensive review of separation requirements in telecommunications in OECD jurisdictions see: (OECD, 2016[89])

[3] Law No. 9472 of 1997.

[4] See (ACCC, 2022[95]) and (Department of Infrastructure, Transport, Regional Development and Communications, 2022[96]).

[5] According to IFT Resolution of 6 of March 2014 approved in Acuerdo P/IFT/EXT/060314/76. The Federal Telecommunications Institute (IFT) has the power to determine the existence of a preponderant operator and impose the necessary asymmetric measures to prevent that competition and free access to that market are not damaged. An agent being preponderant means that it has a national market share of over 50%, measured either by number of users, subscribers, audience, traffic or capacity utilization of its networks. Moreover, the IFT has the responsibility to review preponderance every two years and evaluate whether the measures taken have been effective and the need to modify, add or eliminate them according to the competitive situation of the markets.

[6] According to Acuerdo P/IFT/270218/130 where the IFT approved the implementation plan for the separation of the two companies.

89. From the experiences reviewed above, one can reasonably conclude that the use of structural remedies in an *ex post* merger review context is not unpractical. This is particularly the case when the time passed between the consummation of the transaction and the intervention of the competition authority is short or when the assets of the merging party are not yet fully integrated. Evidence also suggests that break-ups can even increase the value of the involved assets or that, in a more conservative perspective, they are not necessarily too costly or imply losses that cannot be compensated by the gains from more competition gained from the divestiture process. One key lesson common to all the scenarios analysed is that cases where structural remedies have proven feasible usually involve firms where "fault lines" are easily identifiable between business lines. This is often the case in vertical and conglomerate transactions.

3.2.5. The use of behavioural remedies in ex post merger reviews

90. The success of a structural remedy, both *ex-ante* and *ex-post* the completion of a transaction, depends largely on the possibility to identify a suitable purchasers for the assets to be divested (OECD, 2011, p. 20[40]).[52] In an *ex ante* context, behavioural remedies might not be suitable or strong enough for the structural concerns identified, thus, generally leading to the prohibition of the merger. In an *ex post* context, the risk that there are no suitable buyers in what are generally highly concentrated markets may deprive the competition authority of structural solutions, leading towards considering behavioural remedies as imperfect alternatives to structural solutions. The impact of the compulsory sale process might also affect the asset value, making remedies inefficient to restore competition. This risk increases when the merger has been consummated, as the mandatory character of the imposition of the divestiture of the assets can significantly affect the offers (quantity and quality) for the assets to be divested. In addition, when a significant time has passed from the closing, the imposition of structural remedies may also compromise efficiencies in the market that the parties have achieved *post*-merger, even if they are not directly related to the acquisition. Moreover, as discussed above (see Section 3.1) competition authorities have found behavioural remedies to be useful complements to structural remedies in *ex ante* cases, and this would not be different in the case of consummated mergers.

91. While *ex post* behavioural remedies may suffer from same of the same shortcomings of *ex ante* conduct remedies, namely difficulties in precision and comprehensiveness as well as their monitoring costs, because they are designed *ex post*, they could potentially overcome some of the weaknesses existing in an *ex ante* context and be more successful. For example, *ex post* behavioural remedies could be better targeted at the competition concerns, be more specific and less speculative, and therefore potentially they could be less costly to implement and monitor and, ultimately, more successful (see Box 3.18). Their effectiveness could increase if they are designed in light of the status of competition at the moment of the review, and if they take into account the behaviour and commercial decisions of the merged entity and those of its competitors post-merger and observed consumer behaviour. The CMA, for instance, have found that behavioural remedies can be more effective in these circumstances (CMA, 2019, p. 25[88]):

- in markets with simple and homogeneous products;
- in mature markets or markets that are not subject to constant changes and complex price structures; and
- when they are flexible as to account for changes in the market after some time.

Box 3.18. The use of behavioural remedies in the Evanston Northwestern Healthcare Corp. and Highland Park Hospital merger in the US

In January 2002, Evanston Northwestern Healthcare Corp (ENH), who also owned Glenbrook Hospital, acquired Highland Park Hospital, all located in Evanston, Illinois, US. In 2004, the FTC filed a complaint claiming that the merger lessened competition and caused higher prices for insurers and health care consumers in the relevant geographic market (FTC, 2008[97]). Additionally, the complaint alleged that physicians affiliated with both hospitals negotiated and fixed prices illegally, denying consumers the benefit of competition.

In its initial decision, the administrative law judge found that the acquisition resulted in higher prices and substantially lessened competition for acute care inpatient services and ordered the divestiture of the acquired hospital. The aim of the structural remedy was to allow managed care organizations to negotiate separately with the hospitals.

However, on appeal in 2007, the FTC reviewed ENH's proposal and comments and confirmed that the acquisition was indeed anti-competitive, but concluded that in this particular case, the remedy imposed by the administrative law judge would be too costly and potentially risky and imposed a behavioural remedy instead. Principally, it required Evanston to set up two separate and independent contract negotiation teams to bargain with managed care organizations to revive competition between Evanston's two hospitals and the Highland Park hospital (FTC, 2008[98]).

In its analysis, the FTC considered the time passed from the consummation of the merger (seven years) and the improvements that have been developed and implemented post-merger, such as the cardiac surgery program and the implementation at Highland Park of EPIC (a "state-of-the-art" medical record computer system), which would not survive divestiture. The FTC assessed together with the probability of survival of the improvements, the costs of re-establishing and maintaining both programmes, including the time needed to implement them after the divestiture.

It is important to highlight that even though the FTC recognised that the improvements made could have occurred without the transaction, it also acknowledged their relevance to determining whether divestiture was appropriate as it could eliminate their benefits. Emphasis was made on the preference for structural remedies and the particular conditions of the case that made them unsuitable (FTC, 2007[99]).

4. Conclusions

92. This paper has revisited the debate on the appropriate scope of merger control powers of competition authorities. The exercise was done given a background of increasing levels of industry concentration and market power, especially in certain sectors of the economy. Moreover, it reacts to concerns raised by the growth of the major tech companies, which has been achieved also through unscrutinised acquisitions of nascent potential competitors.

93. In particular, we have addressed the powers of competition authorities to review mergers *ex post*, i.e. after their consummation, and what challenges and benefits these powers may bring to effective competition enforcement. Building on past OECD work in this area, this paper focuses specifically on what remedial actions authorities should

consider when disentangling a consummated merger, i.e. on the most effective remedial actions that authorities can put in place should they have jurisdiction over consummated mergers.

94. A number of points emerge clearly from our analysis.

95. Only a relatively small number of jurisdictions have the powers to review consummated mergers and to impose remedies if they would result in a significant lessening of competition, and even fewer of them enforce such powers regularly. Especially in jurisdictions with *ex ante* mandatory pre-notification systems, the use of such powers raises a number of legal challenges and policy considerations, which make their use a fail-safe mechanism for competition authorities.

96. On the wave of recent discussions on enforcement gaps for killer acquisitions, especially in the pharma and high-tech sectors, there has been proposals flagging the benefits for competition authorities to intervene against anti-competitive mergers *ex post* and to remedy possible competition concerns raised by consummated mergers. While this is a typical feature in jurisdictions with a voluntary notification system, only a few jurisdictions with an *ex ante* mandatory pre-notification system have such powers.

97. This paper concludes that *ex post* merger review powers can usefully help filling the enforcement gap caused by the lack of jurisdictional powers on anti-competitive mergers which fall below notification thresholds (i.e. they are not notifiable). There are, however, important considerations which should guide the authorities' use of such powers. These include the effects that *ex post* merger investigations may have on the incentives to merge in the first place, which rest especially on legal certainty and predictability of the merger control system.

98. Additional relevant considerations in the use of such powers relate to the availability of proportionate and effective remedies to address *ex post* the concerns identified by the competition authority. A particularly important role seems to be played by the passage of time between the closing of the transaction and the investigation. The longer this period, the higher the degree of integration of the parties' assets which may result in the practical impossibility of disentangling the consummated merger or in significantly high costs for doing so, also in terms of loss of existing efficiencies.

99. *Ex post* review powers are generally not applicable to the review of mergers that were notified and approved by the competition authority. This approach responds to a need for legal certainty and finality of merger decisions, and aims at preserving the incentives of firms to engage in M&A activities. When applicable to notified and cleared mergers, the standard of proof on the competition authority is very high: it should demonstrate that the harm to competition was foreseeable at the time of consummation. Equity arguments should prevent pro-competitive mergers at the time of consummation to be prohibited later in time due to factors which materialised after the merger itself and independently from it.

100. Divestitures remain the preferable remedial option also in an *ex post* context. Despite criticisms of the high enforcement costs for implementing *ex post* structural remedies, their design and implementation do not seem to be prohibitive per se, as demonstrated by experiences in other antitrust enforcement areas (abuse of dominance and market investigations) and past review of consummated mergers. The review of the rationale and benefits from self-initiated private break-ups, break-ups and structural remedies in non-merger cases as well as with structural separation in regulated industries seem to confirm that competition authorities should not be discouraged from considering structural separation when addressing the consequences of consummated mergers.

101. Designing structural remedies in an *ex post* merger review context, however, can be challenging or even impossible where significant productive assets of the merging party have already been irreversibly combined or have exited the market. This is when "unscrambling the eggs" may be an impossible task. The costs of structural remedies for consummated mergers, however, can be minimised, and the effectiveness of such remedies increased, if they are imposed as closely as possible to the implementation of the merger (which requires authorities to have an effective merger intelligence system) or, if later, when it is still possible to identify "fault lines" between the merged businesses. This might be the case especially for divestitures in *ex post* reviews of vertical mergers or when the remedy is meant to address conglomerate concerns.

102. When structural remedies are not a viable solution to the concerns identified, competition authorities should also consider adopting behavioural / conduct remedies. The well-known limitations of behavioural remedies in an *ex ante* merger review system appear to be less significant when designed in an *ex post* context. Because the competition authority can rely on the hindsight from the market response to the merger and can access information on how the merged entity operated after the consummation of the transaction, it can design such remedies with more precision and in a more comprehensive way to avoid high monitoring costs and circumvention.

103. Experiences of competition authorities have shown that in an *ex post* context behavioural / conduct remedies can be particularly suited to target competition issues in mature markets, in markets where products are homogeneous and price structures simple, and not subject to substantial dynamic changes. Finally, if they are flexible enough to still be revisited after some time, to account for relevant changes in the market.

104. As more jurisdictions adopt and use *ex post* merger review powers, the business community would benefit from increased transparency and more detailed guidance on the circumstance under which such enforcement actions would be considered by the competition authority and what remedy it would be prepared to accept to address the competition concerns identified. Given the high costs of dealing with consummated mergers (to all parties involved), guidelines on when and how to deal with them would contribute to reducing the costs of uncertainty.

Endnotes

[1] For a discussion on how to measure market competition, see (OECD, 2021[129]).

[2] When the target has a small or no turnover, because it is a nascent competitor or is not yet even active in the market, no competition authority will be vested with the review of that transaction raising concerns that it may lead to unscrutinised anti-competitive effects.

[3] Mergers are generally cleared (possibly with remedies if the concerns are surmountable) unless they lead to a monopoly or a duopoly. According to OECD data (CompStats database (OECD, 2022[128])), on average, 99.3% of the mergers notified in 73 jurisdictions around the world between 2015 and 2020 were cleared, while only 0.7% were prohibited. From all the transactions reviewed, 2.2% were conditionally cleared, 0.8% in phase I and 1.4% in phase II or in-depth review.

[4] There exist multiple *ex post*-merger assessments supporting this argument. See for example the summaries made by (Kwoka, 2013[132]) and (Kwoka, 2017[103]); or the ones conducted by the US (US FTC, 2011[134]) and the Dutch Competition Authority (Kemp and Severijen, 2010[131]), both in the healthcare sector. For a more detailed discussion, see also (Blonigen and Pierce, 2016[104]).

[5] While these cases largely lead to the imposition of fines, there may be instances where measures are necessary to prevent potentially anti-competitive effects on the market. However, if the authority investigates the merger, the analysis remains by enlarge an *ex ante* review of the merger itself.

[6] These actions often lead to the imposition of fines and to a re-assessment of the competitive effects of the transaction, but have rarely led to prohibition decisions that required the authority to impose remedies to separate the merging parties' assets and restore the *status quo ante*. For example, the EU, up to 2021, has never revoked a clearance decision because of incorrect information provided during the proceeding (Herbers, 2021[110]). Moreover, according to the contributions of multiple jurisdictions to the OECD Competition Committee roundtable on Investigations of consummated and non-notifiable mergers (OECD, 2014[111]), in jurisdictions where there are powers to review the transaction and, if necessary, to unwind it when the parties have provided false or misleading information, the investigations resulted only in monetary fines and, in the case of the US, criminal charges.

[7] For more information on merger remedies, we refer the reader to the extensive work of the OECD Competition Committee in this areas. See for example Remedies in Cross-border Merger Cases (2013); Remedies in Merger Cases (2011); Merger Remedies (2003) or other relevant roundtables such as those on the Impact Evaluation of Merger Decisions (2011), Agency Decision-Making in Merger Cases (2016) and Designing and Testing Effective Consumer-facing Remedies (2018).

[8] See Agency Decision-Making in Merger Cases (2016).

[9] The US FTC has been one of the major proponents of "merger retrospectives" (See https://www.ftc.gov/policy/studies/merger-retrospectives). The EU has also published a major study on *ex post* review of merger decisions by DG Competition (Ormosi et al., 2015[133]). The OECD itself held a number of roundtables and workshops exploring the experiences of various competition authorities with *ex post* evaluation of enforcement decisions, including merger reviews (see for example (OECD, 2011[6])).

[10] In addition to reducing potential assessment errors, this also translates into more compelling cases in courts, when litigation is involved.

[11] In this respect, *ex post* merger reviews can serve a number of purposes. First, they can help re-evaluate if the competition authority has been too permissive in its approach to merger enforcement, by examining price (and non-price) outcomes in markets where the merger occurred. Second, they can help evaluate the predictive power of various economic tools used to screen or evaluate mergers, e.g. UPP indices or merger simulation. Third, they can help reconsidering the effectiveness of merger remedies of various kinds in addressing potential adverse effects of mergers.

[12] The European Union is one of those jurisdictions which does not allow for *ex post* reviews of consummated mergers. Here, the perceived enforcement gap for mergers falling below the notification thresholds set in the European Union Merger Regulation (EUMR) has been recently addressed by the European Commission which expanded the types of transactions subject to its "upward referral mechanism" under which EU Member State National Competition Authorities can refer transactions to the EC for review (Article 22, EUMR). The EC Guidelines encourage national competition authorities to refer for review at European level acquisitions involving companies with little or no sales in the EC or any Member State if the acquisition target might be competitively significant in the future. Other jurisdictions (such as Germany and Austria) have modified their notification thresholds to ensure that acquisitions of nascent competitors (therefore with no or small turnover) would nevertheless be subject to filings based on the value of the assets involved. (See discussion on “killer acquisitions” in (OECD, 2020[4])).

[13] Nevertheless, the intensive use of resources required to investigate consummated mergers could be comparable to any other enforcement investigation, or to an *ex ante* merger case. Thus, the prioritisation of mergers to challenge has to account for both the benefits and the costs of pursuing the case, as it happens with other powers that competition authorities have.

[14] It is important to highlight that they are not specific to the review of consummated mergers as imposing remedies *ex ante* could also result in sub-optimal solutions and the effectiveness of such remedies could actually be higher in *ex post* review.

[15] The impact that this may have on business’ incentives to merge will depend, of course, on the time limits to which the *ex post* review powers are subject and on whether the competition authority is entitled to challenge a consummated merger which has been previously cleared.

[16] More than 100 jurisdictions around the world have an active merger control regime. In a sample of 73 jurisdictions in the OECD CompStats Database, only seven (that account for less than 10%) do not have an active merger regime. Among the OECD Member countries, only Luxembourg does not have one. While the majority of jurisdictions agrees on the need for a competition law to include merger control, differences still exist on the characteristics and scope of the competition authorities’ merger review powers. Most merger regimes around the world adopt a mandatory pre-merger notification system, charge a filing fee, use turnover as a merger notification threshold, adopt a two-phase regime, and offer a simplified procedure for presumed harmless cases.

[17] This is the case of Chile, Indonesia, Peru, Sweden and Korea. In these jurisdictions, the voluntary notification is an option allowing mergers, which fall below the notification thresholds, to be notified in case the parties wish to obtain legal certainty on non-notifiable transactions that might raise anti-competitive effects.

[18] See (CMA, 2020[127]).

[19] Usually the obligation to notify is on the buyer.

[20] If the parties fail to notify a merger that meets the notification thresholds (so-called ‘gun jumping’), the authority can still investigate the transaction and impose remedies if it has anti-competitive effects; it can also impose a fine on merging parties for breach of the duty to notify.

[21] Usually, a competition authority can review a consummated transaction, in a mandatory notification system, in two circumstances: when the original clearance decision was adopted based

on false or misleading information; and if the merging parties have failed to notify a reportable transaction ('gun jumping').

[22] See discussion in chapter 2.2.2.

[23] See, for example, United States v. E.I. du Pont de Nemours & Co. (1957) where a transaction was challenged 30 years after its consummation.

[24] There are still some cases where jurisdictions with no merger regime have a *de facto* merger control mechanism. For example, in Jamaica, in 2017, the Jamaican Fair Trading Commission applied its general prohibition of anticompetitive practices (Section 17 of the Fair Competition Act) to review a merger between two of the three mobile services providers in the country at the time. See (Jamaica Fair Trade Commission, 2017[135]).

[25] According to the OECD CompStats database, there are 66 jurisdictions (90% of the 73 covered in the database) that have a merger control regime that is in force. These 66 jurisdictions are divided into two groups: (i) 34 jurisdictions that introduced their merger regime in the same year as the year of establishing the competition law; and (ii) 32 jurisdictions introduced the merger control regime in the years following the enactment of the competition law. See (OECD, 2022[128]).

[26] See, for example, in Europe the judgment of the Court of Justice of the European Union in Europemballage and Continental Can v. Commission; Case 6/72; (1973) ECR 215; (1973) CMLR 219 (on the use of Article 102 TFEU, then Article 86 of the EC Treaty) and in British American Tobacco Company Ltd. and R.J. Reynolds Industries Inc. v. Commission; Cases 142/84 and 156/84 (on the use of Article 101 TFEU, then Article 85 of the EC Treaty).

[27] Examples of jurisdictions that can impose structural remedies in abuse of dominance cases are the European Union, according to Article 7 of the Council Regulation (EC) No. 1 of 2003, Canada, as per Section 79 (2) of the Competition Act 1985, and the United States according to Section 2 of the Sherman Act.

[28] To the Secretariat's knowledge, only three OECD countries have such powers: Iceland, Mexico and the United Kingdom.

[29] See for example (Lear, 2019[106]). It concludes that Google, Amazon and Facebook made a combined total of 299 acquisitions between 2008 and 2018. Very few of these mergers received a phase 1 review by the CMA, and even fewer were looked at in detail. Similarly the EU Commission examined very few. For a more detailed discussion on the perceived lack scrutiny of transactions that have been consummated without prior antitrust scrutiny because they were not notifiable, see: (OECD, 2020[4]) and (Kwoka and Valletti, 2021[8]).

[30] Section 16(1) of Law No. 287 of 1990 requires prior notification of transactions involving undertakings whose aggregate turnover in Italy exceeds EUR 511 million and if the aggregate domestic turnover of each of at least two of the undertakings concerned exceeds EUR 31 million.

[31] The main changes regarding merger control involve the replacement of the substantive test (now still based on the creation or strengthening of a dominant position) to align it to EU merger review standards based on a significant impediment to effective competition ("SIEC"), and adopt new notification thresholds. See: (AGCM, 2021[115]).

[32] According to (Pregno and Pili, 2021[109]), the competition authority must also take into account the detrimental effects for the development and diffusion of small enterprises characterized by innovative strategies.

[33] The Bill intends to transpose in Irish law the EU Directive 2019/1 of the European Parliament and of the Council of 11 December 2018 to empower the competition authorities of the Member States to be more effective enforcers and to ensure the proper functioning of the internal market. See its state at (Oireachtas, 2022[116]).

[34] It states that where the Commission finds that a transaction will substantially lessen competition in markets for goods or services in the State, it may determine that the merger should be unwound or dissolved to restore the situation prior its consummation.

[35] It states that a requirement to notify transactions that fall below the thresholds shall be made by the Commission no later than 60 working days after: (i) the date on which one of the undertakings involved in the merger announces publicly an intention to make a bid; (ii) the date on which the Commission becomes aware that the parties have entered into an agreement for a transaction to occur; or (iii) the date on which the merger is put into effect.

[36] "*Whereas behavioral remedies seek to prevent firms from engaging in specific types of conduct, structural remedies seek to eliminate the incentives that would make that conduct possible or likely in the first place*".

[37] They concluded that in some cases, this cost / benefit analysis will counsel against unwinding a merger even if it was foreseeably anti-competitive when it was consummated.

[38] Jurisdictions other than the US, which have actively intervened in *ex post* merger cases, have done so mainly in gun jumping cases when they detected a failure to report a notifiable transaction or when the information provided in the notification process was inaccurate; or in voluntary regimes as discussed in the previous section.

[39] Although Section 7 of the Clayton act allows private parties to sue for violations, private plaintiffs in such cases must demonstrate that they have standing to pursue a claim, this is that there was an antitrust injury caused by the transaction. Given the high bar to prove the injury and the costs and time of litigation, private parties are dissuaded to pursue merger litigation and rather prefer to complain to antitrust agencies (McDonald et al., 2018[63]). Moreover, in the United States there is a four-year statute of limitation on damage claims arising from a merger, while there is no time limit to challenge it from the public enforcement perspective, making public enforcement a much more attractive option.

[40] See (MacLeod, 2021[130]), (Patel, 2020[9]) and (Sher, 2004[14]) for discussions on the difficulty to find remedial actions in *ex post* merger review.

[41] For example, in the 2021 Facebook / GIPHY merger that will be discussed in Box 3.9, at the time of the CMA intervention, Facebook had already terminated GIPHY's revenue function and team, transferred almost all staff on to Facebook contracts and the back office functions, leaving GIPHY at a weaker position than it was pre-merger. Thus, in the design of the remedy, the CMA required Facebook to reinstate certain GIPHY's activities and to ensure that it had the necessary personnel to enable it to compete following the divestiture. This included financial and other incentives to former GIPHY employees to transfer back to GIPHY, as well as recruiting to replace key staff who choose not to do so.

[42] If the merger has not yet been completed, interim measures would be addressed to both the acquirer and the target company. Depending on the stage of integration, the competition authority may aim at (i) preventing the exchange of sensitive information between the parties, (ii) preventing any attempt to further integrate the two businesses, (iii) preventing any joint commercial activity of the merging parties, and (iv) preventing any employment decision that might affect the target company. Competition authorities, however, recognise that in certain circumstances, some degree of integration may be required to maintain the viability of the target business. In these cases, a derogation to the interim measures could be granted by the competition authority, subject to a motivated request by the merging parties.

[43] For a detailed discussion, see (Spangler, 2019[100]), (Hovenkamp, 2018[101]) and (Scott, 2019[102]).

[44] This is the main reason why many jurisdictions where the competition authority has the powers to investigate consummated mergers have limited them in time (see chapter 3.2.1).

[45] This, in turn, creates incentives on the merging firms to move ahead with the integration of the merging parties' assets as quickly as possible and in ways that will make future separation complex, costly or even impossible in order to discourage *ex post* merger investigations in jurisdictions where such powers exist.

[46] (Competition Bureau, 2019[114])and (Gates and Massai, 2021[112]).

47 Although in the European Union, the Commission cannot impose structural remedies following a sector inquiry, the legislator can act on the finding of the Commission also through mandatory structural separation. This was, for example, the case in the sector inquiry into the functioning of the European gas and electricity markets whose main findings included high levels of concentration at wholesale levels, combined with major obstacles to entry, lack of transparency and limited competition at the retail level (DG Competition, 2017[113]). In 2009, to address the concerns identified by the Commission in the Sector Inquiry, the European Parliament and the Council adopted an unbundling programme requiring ownership or functional separation in the electricity and gas sectors.

48 ACCC's Part III Access Undertakings Guidelines.

49 (Kwoka and Valletti, 2021[8]) discuss multiple examples in the telecom and electricity sectors in the United States and the United Kingdom. However, many other jurisdictions have seen such evolution in their markets flashing natural monopolies.

50 One example of divestitures in the electricity sector is the CEZ Electricity Company case (AT. 39727), where the company submitted commitments to the European Commission in 2013 as part of an abuse of dominant position investigation in the Czech Republic electricity market, offering to divest generation assets to account for a determined level of generation capacity.

51 Some OECD countries such as Australia and the UK have had experience of measures that involve structural separation in rail markets (OECD, 2019, pp. 54-55[77]).

52 In the case of structural remedies in an *ex post* merger review, competition authorities face the additional challenge of the feasibility of separating the assets to be divested.

References

ABA (2018), *Comments of the American Bar Association's Sections of Antitrust Law and International Law Regarding the French Competition Authority's Consultation on Modernizing and Simplifying the French Merger Control Law*, https://www.autoritedelaconcurrence.fr/sites/default/files/aba_expost_sept18.pdf. [16]

ABA Antitrust Law Section (2020), *Analyzing the scope of enforcement actions against consummated mergers in a time of heightened scrutiny*, https://ourcuriousamalgam.com/wp-content/uploads/Consummated-Mergers-Policy-Task-Force-Apr-2020-FINAL.pdf. [10]

ACCC (2022), *ACCC Overview of Telstra's Structural Separation Undertaking*, https://www.accc.gov.au/regulated-infrastructure/communications/industry-reform/telstras-structural-separation-undertaking. [95]

ACCC (2008), *Merger Guidelines*, https://www.accc.gov.au/system/files/Merger%20guidelines%20-%20Final.PDF. [20]

AGCM (2021), *Press release: ICA: proposals for pro-competitive reforms (Annual Competition Law proposal) have been sent to Palazzo Chigi*, https://en.agcm.it/en/media/press-releases/2021/3/ICA-proposals-for-pro-competitive-reforms-Annual-Competition-Law-proposal-have-been-sent-to-Palazzo-Chigi. [115]

Akin Gump Strauss Hauer & Feld (2012), *M&A Antitrust Surprise: FTC Challenges $15 Million Merger Consummated in 2007*, http://www.akingump.com/en/newspublications/m-a-antitrust-surprise-ftc-challenges-15-million-merger.html. [29]

Alexiadis, P. and S. E. (2013), "Structural Remedies under European Union Antitrust Rules", *The Concurrences*, Vol. 2, pp. 21-26, https://www.gibsondunn.com/wp-content/uploads/documents/publications/AlexiadisSependa-StructuralRemedies.pdf. [90]

Australian Competition and Consumer Commission (2019), *Digital Platforms Inquiry: Final Report*, https://www.accc.gov.au/publications/digital-platforms-inquiry-final-report. [118]

Bain & Company (2014), *Mastering the Good Breakup*, https://www.bain.com/insights/mastering-the-good-breakup/. [73]

Biden JR, J. (2021), *Executive Order on Promoting Competition in the American Economy*, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/. [31]

Blonigen, B. and J. Pierce (2016), "Evidence for the Effects of Mergers on Market Power and Efficiency", *NBER*, Vol. 22750, http://www.nber.org/papers/w22750. [104]

Broomley, B. (1958), "Business View of the du Pont General Motors Decision", *GEO. L. J.*, Vol. 46, pp. 646-651. [66]

CADE (2018), *Guide to Antitrust Remedies*, https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/guias-do-cade/Guide-Antitrust-Remedies.pdf. [48]

CADE (2016), *Press Release – CADE's Tribunal Approves Solution for the Nestlé/Garoto case*, http://antigo.cade.gov.br/noticias/tribunal-do-cade-aprova-solucao-para-o-caso-nestle-garoto. [71]

CADE (2016), *Technical Note No. 16/2016/DEE/CADE on the merger between Nestlé and Garoto*, https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/notas-tecnicas/2016/nota-tecnica-n16-2016-ato-de-concentracao-08700003861201630.p. [70]

Cavanagh, E. (2005), "Antitrust Remedies Revisited", *Oregon Law Review*, Vol. 147, pp. 147-223, http://chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fcore.ac.uk%2Fdownload%2Fpdf%2F36681186.pdf&clen=290562&chunk=true. [83]

CCCS (2016), *CCCS Guidelines on the Substantive Assessment of Mergers*, https://www.cccs.gov.sg/-/media/custom/ccs/files/legislation/legislation-at-a-glance/cccs-guidelines/cccs-guidelines-on-the-substantive-assessment-of-mergers-2016.pdf?la=. [52]

CCS (2016), *CCS Guidelines on Enforcement of Competition Cases*, https://www.cccs.gov.sg/-/media/custom/ccs/files/legislation/legislation-at-a-glance/cccs-guidelines/cccs-guidelines-on-enforcement-of-competition-cases-2016.pdf?la=en&hash=256333DE943F48D57D6C51FDD227A0206BE744BC. [80]

CMA (2021), *A Quick Guide to UK Merger Assessment.*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970333/CMA18_2021version-.pdf. [23]

CMA (2021), *Completed acquisition by Facebook, Inc. (now Meta Platforms, Inc.) of Giphy, Inc. Final Report*, https://assets.publishing.service.gov.uk/media/61a64a618fa8f5037d67b7b5/Facebook__Meta__GIPHY_-_Final_Report_1221_.pdf. [69]

CMA (2020), *Case Closure Summary*, https://assets.publishing.service.gov.uk/media/5f8036f1e90e07741264a0f2/Tobii-SB_Case_Closure_Summary__9_Oct_20_.pdf. [126]

CMA (2020), *Guidance on the CMA's mergers intelligence function*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/947380/CMA56_dec_2020.pdf. [127]

CMA (2019), *Enforcement Order on the Completed Acquisition by Tobii AB (PUBL) of Smartbox Assistive Technology Limited and Sensory Software International Limited*, https://assets.publishing.service.gov.uk/media/60ca0f0a8fa8f57cf12e61e4/tobii_Order_.pdf. [125]

CMA (2019), *Final Report on the Completed acquisition by Tobii AB of Smartbox Assistive Technologies Limited and Sensory Software International Ltd.*, https://assets.publishing.service.gov.uk/media/5d5d1800e5274a0766482c45/Final_Report2.pdf. [124]

CMA (2019), *Interim Order on the acquisition by Tobii AB of Smartbox Assistive Technologies Limited and Sensory Software International Ltd.*, https://assets.publishing.service.gov.uk/media/5c6d667440f0b647af8f35be/Tobii_Smartbox_Interim_Order.pdf. [122]

CMA (2019), *Merger Remedy Evaluations*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/811252/Merger_remedy_evaluations_2019.pdf. [88]

CMA (2019), *Unlocking Digital Competition: a Report of the Digital Competition Expert Panel*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/ unlocking_digital_competition_furman_review_web.pdf. [117]

CMA (2019), *Unwinding Order on the acquisition by Tobii AB of Smartbox Assistive Technologies Limited and Sensory Software International Ltd*, https://assets.publishing.service.gov.uk/media/5cc3353840f0b64032f1ef18/tobii_smartbox_unwinding_order.pdf. [123]

CMA (2018), *Merger Remedies Guidelines*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/764372/Merger_remedies_guidance.pdf. [47]

CMA (2016), *BAA Airports: Evaluation of the Competition Commission's 2009 Market Investigation Remedies*, https://assets.publishing.service.gov.uk/media/57399d43ed915d152d00000b/evaluation_of_baa__market_investigation_remedies.pdf. [87]

CMA (2016), *Final report on the Retail banking market investigation*, https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf. [36]

CMA (2014), *Press release: Personal current account and small business banking face full competition investigation*, https://www.gov.uk/government/news/personal-current-account-and-small-business-banking-face-full-competition-investigation. [35]

CMA (2013), *Market investigations guidelines: CC3*, https://www.gov.uk/government/publications/market-investigations-guidelines. [85]

Commerce Commission New Zealand (2019), *Merger and Acquisitions Guidelines*, https://comcom.govt.nz/__data/assets/pdf_file/0020/91019/Mergers-and-acquisitions-Guidelines-July-2019.pdf. [21]

Competition Bureau (2019), *Abuse of Dominance Enforcement Guidelines*, https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04420.html#sec04. [114]

Competition Bureau (2006), *Information Bulletin on Merger Remedies in Canada*, https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/02170.html. [49]

Competition Commission (2012), *A report on the completed acquisition by Stericycle, Inc of Ecowaste Southwest Limited*, https://webarchive.nationalarchives.gov.uk/ukgwa/20140402141250/http://www.competition-commission.org.uk/assets/competitioncommission/docs/2011/srcl-ecowaste/ecowaste_final_report_excised.pdf. [65]

Competition Policy, L. (ed.) (209), *Public interest provisions in the South African Competition Act - A Critical Review.* [56]

Cot, J. (2020), *ENTREPRISES STRUCTURANTES: LE SÉNAT ADOPTE UNE PROPOSITION DE LOI*, https://www.concurrences.com/fr/revue/issues/no-2-2020/chroniques/numerique-entreprises-structurantes-proposition-de-loi-le-senat-adopte-une. [107]

Crémer, J., Y. de Montjoye and H. Schweitzer (2019), *Competition policy for the digital era*, https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf. [119]

Department of Enterprise, Trade and Employment (2022), *Competition (Amendment) Bill 2022*, https://enterprise.gov.ie/en/Legislation/Legislation-Files/Competition-Amendment-Bill-2022.pdf. [38]

Department of Infrastructure, Transport, Regional Development and Communications (2022), *Telstra's separation framework*, https://www.infrastructure.gov.au/media-technology-communications/internet/competition-broadband/telstras-separation-framework. [96]

DG Competition (2017), *Report on Energy Sector Inquiry*, https://ec.europa.eu/competition/sectors/energy/2005_inquiry/full_report_part1.pdf. [113]

eBay Inc. (2015), *Press release: eBay Inc. Board Approves Completion of eBay and PayPal Separation*, https://www.ebayinc.com/stories/news/ebay-inc-board-approves-completion-of-ebay-and-paypal-separation/. [75]

European Commission (2021), *Findings on the Evaluation of procedural and jurisdictional aspects of EU merger control*, https://ec.europa.eu/competition/consultations/2021_merger_control/SWD_findings_of_evaluation.pdf. [121]

European Commission (2008), *Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004.*, https://ec.europa.eu/competition/mergers/legislation/files_remedies/remedies_notice_en.pdf. [46]

Ezrachi, A. (2005), "Under (and Over) Prescribing of Behavioural Remedies", *The University of Oxford Centre for Competition Law and Policy*, Vol. Working Paper 13/05, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=913773. [43]

Fletcher, A. (2020), "Market Investigations for Digital Platforms: Panacea or Complement?", *University of East Anglia: Mimeo.*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3668289. [37]

FNE (2021), *Press Release: Interpone requerimiento en contra de Navimag Carga S.A.*, https://www.fne.gob.cl/wp-content/uploads/2021/11/Requerimiento-Navimag-121121.pdf. [67]

FTC (2017), *The FTC's Merger Remedies 2006-2012, A Report of the Bureaus of Competition and Economics*, https://www.ftc.gov/system/files/documents/reports/ftcs-merger-remedies-2006-2012-report-bureaus-competition-economics/p143100_ftc_merger_remedies_200. [45]

FTC (2012), *Final Order in Case No. C-4381*, https://www.ftc.gov/sites/default/files/documents/cases/2012/12/121226magelektrondo.pdf. [61]

FTC (2012), *Press Release FTC Order Restores Competition in Market for Magnesium Plates for Photoengraving*, https://www.ftc.gov/news-events/press-releases/2012/10/ftc-order-restores-competition-market-magnesium-plates. [62]

FTC (2008), *Evanston Northwestern Healthcare Corporation and ENH Medical Group, Inc. Case Summary*, https://www.ftc.gov/enforcement/cases-proceedings/0110234/evanston-northwestern-healthcare-corporation-enh-medical-group. [97]

FTC (2008), *Press Release: FTC Issues Final Opinion and Order to Restore the Competition Lost in Evanston Northwestern Healthcare Corporations Acquisition of Highland Park Hospital*, https://www.ftc.gov/news-events/news/press-releases/2008/04/ftc-issues-final-opinion-order-restore-competition-lost-evanston-northwestern-healthcare. [98]

FTC (2007), *Opinion of the Commission in the Matter of Evanston Northwestern Healthcare Corporation, Docket No. 9315*, https://www.ftc.gov/sites/default/files/documents/cases/2007/08/070806opinion.pdf. [99]

Gates, A. and E. Massai (2021), *The Dominance and Monopolies Review: Canada*, The Law Reviews, https://thelawreviews.co.uk/title/the-dominance-and-monopolies-review/canada. [112]

Givensky, D. (2013), "Investigating Consummated Mergers: The Antitrust Agencies' Shift Toward a Retroactive Enforcement Policy", *Review of Banking and Financial Law*, Vol. 32, pp. 88-97. [15]

Grundin, G. et al. (2020), *Can telcos create more value by breaking up?*, Mckinsey & Company, https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/can-telcos-cr. [94]

Herbers, B. (2021), *Misleading information provided by merging parties*, https://www.mergerfilers.com/articles.aspx?articlelink=36. [110]

Herbert Smith Freehills (2021), *US Court of Appeals affirms first-ever divestment order by private antitrust plaintiff*, https://hsfnotes.com/crt/2021/04/15/us-court-of-appeals-affirms-first-ever-divestment-order-by-private-antitrust-plaintif. [64]

Hovenkamp, H. (2018), "Progressive Antitrust", *Faculty Scholarship at Penn Law*, Vol. 1768. [101]

ICN (2016), *Merger Remedies Guide*, https://www.internationalcompetitionnetwork.org/wp-content/uploads/2018/05/MWG_RemediesGuide.pdf. [39]

J. Thomas Rosch, C. (2012), *Remarks at the ABA Section of Antitrust Law Spring Meeting (2012): Consummated Merger Challenges—The Past is Never Dead.*, http://www.ftc.gov/speeches/rosch/120329springmeetingspeech.pdf. [30]

Jamaica Fair Trade Commission (2017), *FTC cleared to challenge Digicel Claro merger*, https://jftc.gov.jm/ftc-cleared-to-challenge-digicel-claro-merger/. [135]

Justice, U. (2017), *Press Release: Justice Department Reaches Settlement with Parker-Hannifin*, https://www.justice.gov/opa/pr/justice-department-reaches-settlement-parker-hannifin. [33]

Justice, U. (2017), *Press Release: Justice Department Files Antitrust Lawsuit Against Parker-Hannifin Regarding Company's Acquisition of CLARCOR's Aviation Fuel Filtration Products*, https://www.justice.gov/opa/pr/justice-department-files-antitrust-lawsuit-against-parker-hannifin-regarding-company-s. [32]

Kemp, R. and A. Severijen (2010), *Price effects of Dutch hospital mergers, An ex post assessment of hip surgery*, https://doi.org/10.1007/s10645-012-9189-6. [131]

KFTC (2017), *Guidelines for Combination of Enterprises Remedies*, https://www.ftc.go.kr/eng/cop/bbs/selectBoardList.do?key=2857&bbsId=BBSMSTR_000000003634&bbsTyCode=BBST11. [51]

Khan, L. (2019), "The Separation of Platforms and Commerce", *Columbia Law Review*, Vol. 119, pp. 973-980, https://columbialawreview.org/content/the-separation-of-platforms-and-commerce/. [42]

Koltay, G., S. Lorincz and T. Valletti (2021), *Concentration and Competition: Evidence from Europe and Implications for Policy*, http://dx.doi.org/10.2139/ssrn.39925. [3]

Kwoka, J. (2017), "Mergers, Merger Control, and Remedies: A Response to the FTC Critique", https://dx.doi.org/10.2139/ssrn.2947814. [103]

Kwoka, J. (2013), "Does Merger Control Work? A Retrospective on U.S. Enforcement Actions and Merger Outcomes", *Antitrust Law Journal*, Vol. 78/3, pp. 619-650, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1954849. [132]

Kwoka, J. and T. Valletti (2021), "Unscrambling the Eggs: breaking up consummated mergers and dominant firms", *Industrial and Corporate Change*, Vol. 30/5, pp. 1286–1306, https://doi.org/10.1093/icc/dtab050. [8]

Lear (2019), *Ex-post Assessment of Merger Control Decisions in Digital Markets*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/803576/CMA_past_digital_mergers_GOV.UK_version.pdf. [106]

Lewis, D. (2002), *The role of public interest in Merger evaluation, International Competition Network Merger Working Group*, https://www.comptrib.co.za/Publications/Speeches/lewis5.pdf. [54]

Machine, A. (2014), "Public Interest Test and Merger Control in South Africa: The Walmart Case Revisited", *African Antitrust and Competition Law*, https://africanantitrust.com/2014/12/03/public-interest-merger-control-the-walmart-case-revisited/. [58]

MacLeod, W. (2021), *Breaking Up Is Hard to Do During Competition Agency Review: Fixing Before Filing Can Be the Esier Path to Closing*, https://www.competitionpolicyinternational.com/breaking-up-is-hard-to-do-during-competition-agency-review-fixing-before-filing-can-be-the-easier-path-to-closing/. [130]

McDonald, B. et al. (2018), *The US District Court for the Eastern District of Virginia requires divestiture in a long-consummated merger (Steves & Sons / Jeld-Wen)*, https://www.concurrences.com/fr/bulletin/news-issues/october-2018/the-us-district-court-for-the-eastern-district-of-virginia-requires-divestiture. [63]

Muris, T. and J. Nuechterlein (2020), "First Principles for Review of Long-Consummated Mergers", *Criterion Journal of Innovation*, Vol. 5, https://www.criterioninnovation.com/articles/consummated-mergers/#:~:text=Specifically%2C%20they%20would%20have%20to,that%20the%20prospective%20benefits%20of. [13]

Nasdaq (2017), *Has the Split Worked for HP & Hewlett Packard Enterprise?*, https://www.nasdaq.com/articles/has-the-split-worked-for-hp-hewlett-packard-enterprise-2017-01-17. [76]

Nevo, A. (2021), *If breaking up is the answer, then what is the question?*, https://www.competitionpolicyinternational.com/if-breaking-up-is-the-answer-then-what-is-the-question/. [12]

OECD (2022), *Interim Measures in Antitrust Investigations*, https://www.oecd.org/daf/competition/interim-measures-in-antitrust-investigations.htm. [68]

OECD (2022), *OECD Competition Trends 2022*, https://www.oecd.org/daf/competition/oecd-competition-trends-2022.pdf. [128]

OECD (2021), *Ex Ante Regulation and Competition in Digital Markets*, https://www.oecd.org/daf/competition/ex-ante-regulation-and-competition-in-digital-markets-2021.pdf. [108]

OECD (2021), *Methodologies to measure market competition*, https://www.oecd.org/daf/competition/methodologies-to-measure-market-competition.htm. [129]

OECD (2020), *How does the UK use Market Studies to Tackle Emerging Competition Issues*, https://oecdonthelevel.com/2020/11/23/how-does-the-uk-use-market-studies-to-tackle-emerging-competition-issues/. [86]

OECD (2020), *Start-ups, Killer Acquisitions and Merger Control*, https://www.oecd.org/daf/competition/start-ups-killer-acquisitions-and-merger-control-2020.pdf. [4]

OECD (2019), *OECD Peer Reviews of Competition Law and Policy: Brazil*, https://www.oecd.org/daf/competition/oecd-peer-reviews-of-competition-law-and-policy-brazil-ENG-web.pdf. [27]

OECD (2019), *The divestiture of assets as a competition remedy: Stocktaking of international experiences*, https://www.oecd.org/daf/competition/divestiture-of-assets-competition-remedy-ENG-web.pdf. [77]

OECD (2018), *Gun jumping and suspensory effects of merger notifications*, https://one.oecd.org/document/DAF/COMP(2018)11/en/pdf. [7]

OECD (2018), *Market Concentration*, https://one.oecd.org/document/DAF/COMP/WD(2018)46/en/pdf. [2]

OECD (2018), *Suspensory Effects of Merger Notifications and Gun Jumping - Note by Australia*, https://one.oecd.org/document/DAF/COMP/WD(2018)75/en/pdf. [19]

OECD (2018), *Suspensory Effects of Merger Notifications and Gun Jumping - Note by New Zealand*, https://one.oecd.org/document/DAF/COMP/WD(2018)144/en/pdf. [22]

OECD (2018), *Suspensory Effects of Merger Notifications and Gun Jumping - Note by the United Kingdom*, https://one.oecd.org/document/DAF/COMP/WD(2018)93/en/pdf. [24]

OECD (2016), *Agency Decision-Making in Merger Cases*, https://one.oecd.org/document/DAF/COMP/WP3(2016)6/en/pdf. [105]

OECD (2016), *Public Interest Considerations in Merger Control*, https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WP3(2016)3&docLanguage=En. [53]

OECD (2016), *Reference Guide on Ex-Post Evaluation of Competition Agencies' Enforcement Decision*, https://www.oecd.org/daf/competition/Ref-guide-expost-evaluation-2016web.pdf. [5]

OECD (2016), *Report on the Implementation of the OECD Recommendation Concerning Structural Separation in Regulated Industries adopted in 2011*, https://www.oecd.org/daf/competition/Structural-separation-in-regulated-industries-2016report-en.pdf. [89]

OECD (2014), *Investigations of Consummated and Non-Notifiable Mergers*, https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WP3(2014)1&doclanguage=en. [1]

OECD (2014), *Investigations of Consummated and Non-Notifiable Mergers Country Contribution from Sweden*, https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WP3/WD(2014)6&docLanguage=En. [26]

OECD (2014), *Investigations of consummated and non-notifiable mergers: Country Contributions*, https://www.oecd.org/fr/daf/concurrence/investigations-consummated-non-notifiable-mergers.htm. [111]

OECD (2014), *Roundtable on Investigations of Consummated and Non-Notifiable Mergers, Australia's Contribution*, https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WP3/WD(2014)16&docLanguage=En. [18]

OECD (2011), *Impact Evaluation of Merger Decisions*, https://www.oecd.org/daf/competition/Impactevaluationofmergerdecisions2011.pdf. [6]

OECD (2011), *Remedies In Merger Cases*, https://www.oecd.org/daf/competition/RemediesinMergerCases2011.pdf. [40]

OECD (2006), *Remedies and Sanctions in Abuse of Dominance Cases*, https://www.oecd.org/daf/competition/abuse/38623413.pdf. [34]

OECD (2003), *Merger Remedies*, https://www.oecd.org/competition/mergers/34305995.pdf. [41]

OECD (2001), *OECD Recommendation Concerning Structural Separation in Regulated Industries*, https://www.oecd.org/daf/competition/recommendationconcerningstructuralseparationinregulatedindustries.htm. [91]

Oireachtas, H. (2022), *State of the Competition (Amendment) Bill 2022*, https://www.oireachtas.ie/en/bills/bill/2022/12/. [116]

Ormosi, P. et al. (2015), *A review of merger decisions in the EU: what can we learn from ex-post evaluations?*, European Commission Luxembourg Publications Office, https://ec.europa.eu/competition/publications/reports/kd0115715enn.pdf. [133]

Oxenham (2012), "Balancing public interest merger considerations before sub-Saharan African competition jurisdictions with the quest for multi-jurisdictional merger control certainty", *US-China Law Review*, Vol. 9/211, https://africanantitrust.files.wordpress.com/2013/11/2012072706196124.pdf. [57]

Patel, M. (2021), *A Proposal to Invigorate Ex PostMerger Policy*, https://www.competitionpolicyinternational.com/a-proposal-to-invigorate-ex-post-merger-policy/. [11]

Patel, M. (2020), "Merger Breakups", *Wisc. L. Rev.*, Vol. 975, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3469984. [9]

Philip Lowe, M. (ed.) (2016), *Behavioural versus Structural Remedies in EU Competition Law*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2457594. [78]

Potter, A., A. Jones and M. McElwee (2014), *United Kingdom*, https://www.kinstellar.com/source/files/articles/articles_000051.pdf. [17]

Practical Law (2020), *Antitrust, Consummated Mergers Antitrust Enforcement Chart*, https://uk.practicallaw.thomsonreuters.com/7-532-4454?transitionType=Default&contextData=(sc.Default)&firstPage=true. [60]

Pregno, G. and F. Pili (2021), *The Italian Competition Authority Proposed an Extensive Competition Law Reform*, https://www.concurrences.com/fr/bulletin/news-issues/march-2021/the-italian-competition-authority-proposes-an-extensive-competition-law-reform. [109]

S., O. and S. Sibanda (2015), "Public Interest Considerations In The South African Anti-Dumping and Competition Law, Policy and Practice", *International Business and Economics Research Journal*, Vol. 14/5, https://clutejournals.com/index.php/IBER/article/download/9376/9457. [55]

Scott, F. (2019), *Why 'breaking up' tech probably won't work*, https://www.washingtonpost.com/opinions/2019/07/16/break-up-facebook-there-are-smarter-ways-rein-big-tech/. [102]

Sher, S. (2004), "Closed but not forgotten: Government review of consummated mergers under Section 7 of the Clayton Act", *Santa Clara Law Review*, Vol. 45, https://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?article=1212&context=lawreview. [14]

Smith, P. and A. Swan (2014), *Africa: public interest factors in competition decisions*, https://africanantitrust.files.wordpress.com/2013/12/public-interest.pdf. [59]

Spangler, T. (2019), *Will the U.S. Break Up Big Tech: Don't Hold Your Breath*, https://variety.com/2019/digital/news/us-antitrust-break-up-facebook-google-amazon-apple-1203232588/. [100]

Stigler Center for the Study of the Economy and the State (2019), *Report of the Committee for the Study of Digital Platforms*, https://research.chicagobooth.edu/stigler/media/news/committee-on-digital-platforms-finalreport. [120]

Sullivan, E. (2001), "The Jurisprudence of Antitrust Divestiture: The Path Less Traveled", *Minnesota Law Review*, Vol. 86, pp. 565-612, https://heinonline.org/HOL/LandingPage?handle=hein.journals/mnlr86&div=19&id=&page= . [84]

Superintendencia de Industria y Comercio (2019), *Guía de Análisis de Integraciones Empresariales*, https://www.sic.gov.co/sites/default/files/files/Proteccion_Competencia/Integraciones_Empresariales/2019/Gu%C3%ADa%20Integraciones%20Empresari. [50]

Swanson, B. (2014), *Lessons from the AT&T breakup, 30 years later*, https://www.aei.org/technology-and-innovation/lessons-att-break-30-years-later/. [92]

Swedish Competition Authority (2022), *Acquisitions Statistics*, https://www.konkurrensverket.se/konkurrens/lagar-och-regler/forvarv/statistik-om-forvarv/ (accessed on 22 February 2022). [28]

Swedish Competition Authority (2018), *Guidance from the Swedish Competition Authority for the Notification and Examination of Concentrations between Undertakings*, https://www.konkurrensverket.se/globalassets/dokument/engelska-dokument/competition/guidance-from-the-swedish-competition-authority-for-the-notification-and-examination-of-concentrations-between-undertakings_2018.pdf. [25]

Taplin, R. and M. Wakui (eds.) (2006), *Changes in the interface and industry structure. In Japanese Telecommunications: Market and Policy in transition*, Routledge. [93]

The Walt Disney Company (2018), *Press release: U.S. Department of Justice Clears Disney Acquisition of 21st Century Fox*, https://thewaltdisneycompany.com/u-s-department-of-justice-clears-disney-acquisition-of-21st-century-fox/. [74]

US Department of Justice (2009), *Competition and Monopoly: Single-Firm Conduct Under Section 2 of the Sherman Act. Chapter 9*, https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-9. [79]

US DOJ (2020), *Merger Remedies Manual*, https://www.justice.gov/atr/page/file/1312416/download. [44]

US FTC (2011), “Competition issues related to mergers in the US hospital industry”, *International Journal of the Economics of Business*, Vol. 18/1, https://www.tandfonline.com/toc/cijb20/18/1?nav=tocList. [134]

Van Loo, R. (2020), “In Defense of Breakups: Administering a “Radical” Remedy”, *Cornell Law Review*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3646630. [72]

Waller, S. (2007), “The Story of Alcoa: The Enduring Questions of Market Power, Conduct, and Remedy in Monopolization Cases”, *Antitrust Stories*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=949925. [82]

Waller, S. (2003), “The Incoherence of Punishment in U.S.Antitrust Law”, *Chicago-Kent Law Review*, Vol. 78, https://www.semanticscholar.org/paper/The-Incoherence-of-Punishment-in-Antitrust-Waller/cc859a1ff359253d749ab6132fd6ee2d15cbfe27?p2df. [81]