OUT-OF-MARKET EFFICIENCIES IN COMPETITION ENFORCEMENT

OECD Competition Policy Roundtable Background Note

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Foreword

In most jurisdictions, claims of efficiencies to be set against findings of anticompetitive harm are largely or wholly restricted to effects in the market where that harm occurs. This paper is about out-of-market (OOM) efficiencies, particularly when acceptance of an OOM efficiency claim could cause an otherwise prohibited merger or agreement to be accepted, or at least remedies to be modified. It is therefore concerned only with a more permissive approach; not whether competition law enforcement should be tougher as a result of any OOM effects. In practice, all jurisdictions will seek remedies that keep the efficiencies and avoid the harm but this paper is concerned with the rare difficult cases in which a choice must be made.

Jurisdictions' approaches to OOM claims vary, partly reflecting the overall goals of their competition laws. For example, jurisdictions applying some kind of total welfare standard are generally open to OOM efficiencies claims but the converse is not true: not all jurisdictions applying a consumer welfare standard reject such claims. Non-welfare standards that are based on protecting competition in itself rather than some overall welfare assessment are in principle the least compatible with OOM claims. For example, upstream monopsonistic harm to a labour market may result in lower prices to end-consumers downstream, but for example in the US the latter could be excluded as being out-of-market, reflecting an overall aim to prevent harm from anticompetitive conduct, not maximise consumer welfare.

All jurisdictions in practice focus on preventing some specific conduct's harm to competition to some extent. Even those open to OOM claims would not conduct general equilibrium modelling of whether on balance benefits exceed the costs across the economy.

Applying an out-of-*market* rule can imply accepting or rejecting efficiency claims rather arbitrarily following the analytical process of market definition. Some agencies nowadays might define markets more narrowly than they used to, this rules out more efficiency claims, perhaps unintentionally. Furthermore, market boundaries are often defined less rigidly, for the purposes of competitive assessment, but this is not compatible with an 'in or out' distinction for efficiency claims. A future benefit to compensate for current harm might be ruled out, as being in a separate market (this is particularly important for environmental claims).

OOM efficiency claims are subject to at least the same procedural barriers as in-market claims, which are rarely accepted by competition authorities. However, most jurisdictions go further in restricting or entirely ruling out such claims. For example, in the US court precedents largely rule out considering OOM efficiency claims in mergers and agreements and the existing limited agency prosecutorial discretion to consider them is being removed in the latest draft Merger Guidelines. In the EU, efficiencies must fully compensate harmed consumers, so OOM efficiencies can be considered only if the consumers in the other market are 'substantially the same' as those in the harmed market. However, some jurisdictions such as Australia, Germany and the UK do permit such claims in some circumstances. Abuse of dominance and vertical cases often consider harm in one market against benefits in another but rarely treat them specifically as OOM efficiencies.

The use of market definition to decide eligibility of efficiency claims has been particularly problematic in multi-sided markets, especially for payment card interchange fees. As the OECD has discussed, whether

two sides of a two-sided market are in the same market or in separate markets may not be crucial for the competitive assessment, as long as the links between the two are recognised. However, a competition authority or court treating the two as separate markets may be unable fully to consider those links, if OOM efficiencies are excluded, for example when prices fall on one side of the market and rise on the other.

The argument for taking account of OOM efficiencies claims is straightforward: everyone's welfare counts, so why not? There are various counter-arguments:

1. Protection of competition in itself as a goal, which is implicit or explicit in most jurisdictions, so competitive harm cannot be compensated elsewhere.
2. The 'slippery slope' towards monopolisation, as anti-competitive mergers are approved, because of their pro-competitive effects in other markets. However, this will rarely be the case (and competition authorities would normally have discretion to stop it).
3. Additional complexity and resource costs in evaluating such claims. This seems the most relevant objection: most authorities already spend more time and resources than ever investigating cases.
4. Relatedly, because of this complexity, competition authorities and courts could mistakenly approve more anticompetitive mergers and conduct.

Several commentators have proposed loosening the rule prohibiting OOM efficiency claims in general, mainly in the US. Criteria proposed for eligibility include demand-side complementarities between markets, joint production which makes carving-out remedies impossible, vertical markets and a specific exemption for multi-sided markets. However, in the latest draft Merger Guidelines, the US agencies are tightening rather than loosening the rule.

Several competition authorities in Europe have proposed an explicit exemption for OOM claims in some sustainability agreements, especially those relating to climate change. They cite the urgency and importance of such policies, as well as the ethical argument that 'harmed' consumers are often imposing high pollution externalities on others, and society. Society's interests should come first, but the OOM rule would exclude them and the rule that harmed consumers should be compensated is a 'polluter's veto' Others, notably the EC, see no reason for any different treatment, holding to the rule that harmed consumers must be compensated, for example if they are 'substantially the same' as the people benefitting.

In principle, there is no reason to be more welcoming of environmental OOM efficiencies claims than other OOM claims. All the arguments against are at least as strong and the concern about additional complexity (and consequent 'greenwashing') greater. There is also a principled question as to whether and how competition authorities and courts can weigh the benefits of an agreement raising standards above the legal minimum, against its costs, when governments could presumably have decided to set a higher minimum. Furthermore, there is little if any evidence on the environmental effectiveness or harm to competition from such agreements.

Turning to practical matters, assessing OOM efficiencies such as environmental and social outcomes can require analytical tools outside competition authorities' expertise such as assessing shadow prices for pollutants or long-run discount rates. However, other public bodies often have such measures already, so this need not result in an unduly complex task.

This paper concludes with some suggestions, while recognising that the EU and US at least have established their positions. These are:

1. If there were to be any movement towards loosening the restrictions on OOM claims, criteria could be widened to include both demand-side and supply-side considerations.
2. Perhaps the rule could be redefined to reflect 'consumer groups' rather than 'markets', to avoid the eligibility of claims depending on the analytical process of market definition.

3. Failing that, competition authorities could consider a specific exemption for multi-sided markets, as the analytical process of market definition in such cases is particularly unlikely to lead to clear boundaries for what is 'in' and what 'out'.
4. Some *ex post* evidence on environmental benefits from anti-competitive agreements would be useful, to move the debate on (this requires some agreements to be allowed).
5. Competition authorities that can consider OOM environmental and social claims should make use of other public bodies' expertise in assessing them.

This paper was written by John Davies (Member of the UK Competition Appeal Tribunal) working as a consultant for the OECD Competition Division. It was prepared as a background note for discussions on "Out-of-market efficiencies in competition enforcement" taking place at the December 2023 session of the OECD Competition Committee, *https://www.oecd.org/daf/competition/out-of-market-efficiencies-in-competition-enforcement.htm*. The note received comments from Ori Schwartz, Antonio Capobianco, Federica Maiorano and Cristina Volpin, all from the OECD Competition Division.

The views expressed here are personal ones and in no way reflect the UK Tribunal's position. The author was previously a consulting economist, in which capacity he advised and was instructed by various clients in matters relating to the issues discussed here, notably claimants in interchange fee payment card litigation and both complaining and investigated parties in abuse of dominance investigations of digital platforms.

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1 Introduction

Competition authorities often face claims of efficiencies resulting from some allegedly anticompetitive conduct (or merger), acceptance of which could cause them to permit that conduct or amend any remedy for it. However, in many jurisdictions, efficiencies arising in markets other than those in which harm to competition occurs are not considered or will be considered only in narrowly-defined circumstances. This background paper supports the OECD Competition Committee's discussion of this topic.

A competition authority that is open to claims of out-of-market efficiencies might take some very different decisions from one that does not, as the following examples demonstrate:

- Multi-market merger. Two merging firms each sell products that are produced together (such as air travel services), into several markets (routes, for example). Suppose there are competition concerns in only one market, but the parties claim the merger will produce cost-reducing efficiencies across their entire businesses. Then overall, consumers of the firms' products would gain from the merger, but it may be that consumers of the overlap product could lose. A competition authority that can accept out-of-market efficiencies might approve the merger; one that does not might block it. Both, of course, might seek market-specific remedies, if available.
- Two-sided market. Suppose a competition authority is investigating potentially abusive practices by a platform operating on both sides of a two-sided market, such as a newspaper offering content to paying users and space to paying advertisers. If the practice results in a more efficient offer across the two-sided market, but raises prices to one of these sides, then again, that practice will be dealt with differently by competition authorities depending on their approach to out-of-market efficiencies. The decision will also, of course, depend on whether they define the two sides as part of a single two-sided market or as two separate markets.
- Suppose a collusive agreement aims to reduce greenhouse gas emissions among participating firms by eliminating the cheapest, highest-carbon products from each firm's range. Then consumers of those products will be harmed, but consumers in other markets (or more widely, 'people' across the competition authority's jurisdiction and even globally) will benefit.

Cases involving two-sided markets, especially interchange fees, and increasing interest in environmental benefits have led to renewed interest in this topic. Several competition authorities have issued guidance on sustainability agreements, taking very different approaches from one another. It is therefore timely for the Competition Committee to consider this topic.

The OECD has considered related topics before, for example in discussing:

- welfare standards (OECD, 2023[1])
- environmental considerations in competition enforcement (OECD, 2021[2])
- efficiency claims (OECD, 2012[3]).

There are also minor overlaps with discussions of

- payment cards and systems (OECD, 2006[4]; 2012[5])
- multi-sided markets (OECD, 2018[6])
- competition and labour markets (OECD, 2020[7])

- others relating to environmental and extra-territorial considerations in competition policy.

Definitions will rarely be universally applicable, but to establish some conventions at the start of this paper:

- In this paper 'efficiencies' refers to any beneficial effect arising from anti-competitive conduct or a competition-harming merger. This includes rivalry-enhancing efficiencies, which counteract anti-competitive effects (especially from a merger) as well as 'consumer (or other) benefits', which do not arise through their effects on competition and compensate for, rather than counter-act, anti-competitive effects. The 'benefits' considered here are not necessarily limited to those received by consumers because (i) in jurisdictions applying a total welfare standard others could benefit and (ii) environmental benefits are not usually considered to accrue to consumers (except in the trivial sense that everyone is a consumer of something).
- Consumer efficiencies, price reductions or other gains, accruing to direct customers or indirectly end-consumers of a product are different from producer efficiencies: increased profits from that product.
- Out-of-market (OOM) efficiencies are those arising in a market other than the market in which anti-competitive harm is found to occur. This 'harmed' market or markets need not, of course, be the market in which anti-competitive conduct (or a merger) takes place. For example, a merger upstream between two suppliers of inputs could harm intermediate producers directly through higher input prices and downstream consumers indirectly through higher final product price. In this case an efficiency claim would be 'out of market' if it affected neither of those harmed groups. When jurisdictions' rules require that efficiencies largely or fully compensate harmed consumers, that compensation should be understood to be required for all consumers harmed by the anti-competitive action, possibly across several separate or linked markets.

The topic is limited to efficiencies and therefore concerns whether competition authorities should take a more permissive approach to otherwise anti-competitive mergers or conduct. This paper does not consider the wider questions of whether competition authorities should consider harms other than through a loss of competition or should consider non-competition objectives in other ways.

The rest of the background note is organised as follows. Section 2 discusses how OOM efficiency claims fit within the wider process of assessing competition violations. Section 3 sets out the arguments in favour and against considering OOM efficiency claims. Section 4 considers arguments for and against a specific exemption for OOM environmental efficiencies. Section 5 concludes.

2 Efficiency claims in and out of the affected market

This section discusses how OOM efficiency claims fit within the wider process of assessing competition violations under the following headings:

1. the treatment of efficiencies in general, in-market and out
2. relationships between the treatment of OOM efficiencies claims and welfare standards
3. the scope of OOM efficiency claims under existing approaches, internationally
4. the role of market definition
5. OOM efficiency claims in multi-sided markets.

Topics specific to environmental efficiency claims are discussed in Section 4 , but the principles here apply to those claims too.

2.1. Treatment of efficiencies in general

Competition authorities considering OOM efficiency claims subject those claims to the same high bars that they apply to in-market efficiency claims. Practice on such claims is fairly common across jurisdictions. To take as an example Brazil's merger guidelines, as an illustration of the common elements: CADE will accept efficiency claims only if:

- They are likely and verifiable.
- They enhance consumer welfare, in that a significant share of the benefits are provided to consumers.
- They are specific to the merger, CADE's guidelines being more explicit than most in noting that efficiencies which could be achieved in less than two years through plausible alternatives and involving less competitive restraints are not to be considered specific.[1]

Most competition authorities have similar conditions in merger guidelines[2], the EU for example stating that "the efficiencies have to benefit consumers, be merger-specific and be verifiable"[3]. However, some authorities also consider benefits other than consumer welfare.[4]

In applying such frameworks, competition authorities place the burden of proof squarely on the parties. This reflects concern that the asymmetry of information always present between parties under investigation and competition authorities will be particularly acute for efficiency claims, because such claims relate mainly to the parties' own businesses, not to the market. Partly as a result of this burden-shifting, even in-market efficiency claims are rarely accepted.[5]

Similar procedural barriers also apply to OOM efficiency claims in jurisdictions that allow such claims and would, presumably, also apply to any OOM efficiency claims in a jurisdiction which changed its policy to be more open to them.

2.2. OOM efficiencies and welfare standards

The treatment of OOM efficiencies can require answers to fundamental questions about what it is competition policy is trying to achieve.

Most jurisdictions apply some form of consumer welfare standard; others such as Canada, Norway and (through their authorisation regimes) Australia and New Zealand include some 'total welfare' considerations.[6] A total welfare approach puts more weight on efficiencies, because efficiencies which increase profits in the market under investigation but do not directly benefit consumers in that market can be considered. However, in practice categories like 'total welfare' and 'consumer welfare' are not black and white. All competition jurisdictions favour consumers to some extent; none simply seeks to 'maximise economic welfare' weighing everything up equally, in the sense that an abstract economic model might.

In such an abstract model, Williamson (1968[8]) showed that cost savings resulting from a merger do not need to be of a similar size to price rises for the merger to increase total welfare. For example, Williamson calculated that a merger increasing prices by 20% would increase total welfare if cost efficiencies were as small as 4%, although this assumes a merger from a competitive market to monopoly, which might overstate the case. More generally, his simple static framework excluded dynamic effects that might lead to greater efficiencies in the long run, or conversely a greater loss of competition, for example through innovation effects.

The Antitrust Paradox (Bork, 1978[9]) is generally regarded as having led calls for competition law enforcement to recognise such 'total welfare' considerations. To the confusion of generations of legal and economics students, Bork called his proposed approach a 'consumer welfare standard'. He was doing so in part to contrast it to a standard based not at all on welfare but also because producers are consumers too, so increased profits ultimately flow to consumption elsewhere. Arguably, Bork was not advocating adding up consumer and producer welfare in the single market under examination, but rather consumer welfare across *all* markets.[7] [8] [9]

This suggests a broad equivalence between applying a total welfare standard and accepting 'out of market efficiencies' (but the converse does not apply: openness to OOM benefits need not involve accepting a total welfare standard). This equivalence seems borne out by competition authority practice. Jurisdictions more open to producer efficiency claims (operating something closer to a total welfare standard) do not seem to limit such claims to the affected market.

For example, Canada, Australia and New Zealand all seem to allow such claimed efficiencies to arise anywhere, although in some cases explicitly excluding any such gains achieved abroad.[10] However, illustrating the principle that a consumer welfare standard need not imply rejecting such claims, some jurisdictions that explicitly apply a consumer welfare standard do allow claims of OOM efficiencies, as the UK for example does in not limiting claims of 'consumer benefits' in mergers to the harmed market.

Including 'total welfare' considerations in enforcement should not be thought of as simply adding add up all of the pluses and minus that could result from some merger or conduct – with harm to competition just one of the minuses. Instead, the assessment starts with the harm to competition, then considers whether anything else might justify it, possibly with a high procedural bar to any efficiency claims. Jurisdictions vary in what kinds of justification they can consider and what weight to place upon them but they are not in general indifferent between anti-competitive harm and missed opportunities for other benefits, as a purely mechanical approach to aggregate welfare maximisation would be.

2.3. The scope of OOM efficiency claims and some limited exceptions to excluding them

OOM efficiency claims could in principle arise in any area of a competition authority's work but in practice are most explicitly made in investigations of mergers and horizontal agreements, so this paper's focus is on those, after a brief discussion of why abuse of dominance and vertical agreements are largely excluded.

2.3.1. Abuse of dominance and vertical agreements: OOM efficiencies part of assessment in the round, rather than explicit efficiency defences

Jurisdictions' formal positions on OOM efficiency claims in abuse of dominance and vertical agreements are usually no different from those for other types of cases. For example, the EU, in its *Guidance on enforcement priorities for abuse of dominance cases,* requires for an 'objective necessity' defence that "the likely efficiencies brought about by the conduct outweigh any likely negative effects on competition and consumer welfare in the affected markets"[11]. However, it can be hard to distinguish an OOM efficiencies claim in such cases from core concerns, such as inter-market leveraging. In practice such cases do often involve consideration of effects across markets.

The assessment of abuse of dominance often requires consideration of effects for several different groups of consumers, whether separated in time (as in predatory pricing cases, in which existing consumers while future consumers suffer reduced competition) or in product space (as in tying cases, when restrictions in one market can promote competition in another). Similarly, vertical restraints cases often deal with trade-offs between inter-brand markets in which manufacturers compete and intra-brand markets in which retailers compete. These are not usually treated as OOM efficiencies, but rather involve an assessment of effects in the round.

For example, in the US, the *Topco* decision is sometimes discussed as prohibiting consideration of OOM effects, when the Supreme Court condemned an agreement assigning territorial exclusivity, citing its "*inability to weigh, in any meaningful sense, destruction of competition in one sector of the economy against promotion of competition in another sector"*[12]

However, the 'weighing' exercise the Court was rejecting in this judgment was between intra-brand and inter-brand competition, which became standard practice in the US following the later *Sylvania* judgment, as it is in most jurisdictions in which vertical restraints or related abuse of dominance cases are assessed on the basis of the rule of reason or 'effects'.[13]

This paper will therefore not consider abuse of dominance cases or vertical agreements, as competition authorities rarely consider cross-market effects as OOM efficiency claims in such cases, and more generally such cross-market effects have been debated extensively.

2.3.2. Mergers

In a merger investigation, a claim of OOM efficiencies (if considered at all) would normally be considered only after an initial finding of harm to competition and could in principle either outweigh that finding, overturning it, or result in modified remedies.

Except for those operating explicit total welfare standards, many jurisdictions entirely exclude any such claims or allow them only in very strictly limited circumstances (for instance, see Box 2.1 below). This reflects various concerns about the consequences of being open to such claims, as will be discussed below in Section 3, but may also reflect a fundamental concern that merger control should prevent anti-competitive harm to consumers. An OOM efficiencies claim will only be relevant when a competition authority expects such harm to occur – and by definition such efficiencies will not prevent such harm in the affected market.

Box 2.1. OOM efficiencies in US merger control: Philadelphia National Bank and its consequences

In Philadelphia National Bank ("PNB"), merging banks made two efficiency claims, both rejected for several reasons including the fact that the efficiencies were outside the Philadelphia area affected by the merger. First, the banks claimed that together they would be able to offer loans to larger customers, in competition with New York banks, in a national market. Rejecting this, the US Supreme Court noted:

"*If anticompetitive effects in one market could be justified by procompetitive consequences in another, the logical upshot would be that every firm in an industry could, without violating § 7, embark on a series of mergers that would make it, in the end, as large as the industry leader*."

Second, the banks claimed their merger would benefit the economy in Philadelphia more generally, on which the Court found:

"*We are clear, however, that a merger the effect of which "may be substantially to lessen competition" is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial. A value choice of such magnitude is beyond the ordinary limits of judicial competence, […]*"

The PNB decision has therefore been taken to rule out OOM efficiency defences in mergers, although (Werden, 2017[3]) disputes such a rigid reading, noting the other reasons given for rejection of the merger as well as uncertainties about the market definition. Other US merger cases have cited PNB to rule out taking account of OOM efficiencies.

In practice, even though at times US merger guidelines have allowed limited exceptions as a matter of the agencies' prosecutorial discretion but, as Baker (2019[10]), comments "*but under Philadelphia National Bank, which still controls, courts cannot follow suit*." The agencies have removed these exceptions in the 2023 draft Merger Guidelines.

Sources: United States v. Phila. Nat'l Bank, 374 U.S. 321 (1963), Werden (2017[11]), Cross-market Balancing of Competitive Effects: What Is the Law, and What Should It Be, https://jcl.law.uiowa.edu/sites/jcl.law.uiowa.edu/files/2021-08/Werden_Final_Web.pdf, Baker, (2019[10]), The Antitrust Paradigm

There have, however, been limited exceptions to such rules, which are hard to generalise in principle but reflect different ways in which jurisdictions have allowed some flexibility within their specific merger processes.

Limited exception 1: markets that are inextricably linked, so remedies cannot separate the harm from the efficiencies?

Most competition authorities, confronted with a merger with anti-competitive effects but cogent efficiencies claims, will seek the best of both worlds: tailoring a remedies package to deal with the harm while preserving the gains. However, in some cases the markets will not be sufficiently distinct for this to be possible, for example when national production efficiencies might have anti-competitive effects in just a few local markets.

Those markets could be said to be 'inextricably linked', providing a limited exception to the exclusion of OOM efficiency claims, as for example in the current US Horizontal Merger Guidelines (US DoJ, 2010[12]), unchanged from the version cited in the US agencies 2006 Commentary on a decision not to challenge a merger of two bakeries, where the "*merger-specific efficiencies would benefit all customers, and the restaurant and institutional customers potentially of concern accounted for only about 20% of the*

companies' sales."[14] However, this exception has been removed in the US agencies' draft *Merger Guidelines* issued in 2023 (DoJ and FTC, 2023[13]).

In principle, such a rule is not an 'exception' to a general prohibition on considering OOM efficiency claims at all. If anti-competitive mergers that result in net benefits to consumers overall are allowed whenever no tailored remedy is available, that is no different from what a competition authority generally open to OOM efficiency claims would do: seek a remedy that preserved the gains, while remedying any harmed markets, if possible. So, if widely applied, such an exception would simply allow consideration of OOM efficiency claims. However, as the example of the bakeries shows, the condition was in fact interpreted as applying only in exceptional circumstances, when the agencies considered the efficiency gains to be large and in practice it was certainly treated as a rare exception.

Limited exception 2: distinctions between competition-enhancing efficiencies and consumer benefits?

Efficiencies can either result in enhanced competition, or in non-competition benefits that could compensate for lost competition. The distinction is not very relevant to in-market efficiencies, as a competition-enhancing effect would presumably be taken into account in the substantive assessment (Substantive Lessening of Competition - SLC, for example). However, when considering out of market efficiencies, the two do have distinct effects and a competition authority might put more weight on a pro-competitive efficiency gain in another market than a merely compensatory gain.[15]

A few jurisdictions do appear to draw such a distinction, such as Switzerland where the law explicitly limits efficiency considerations to those improving competition in markets other than those harmed by a merger (presumably because efficiencies within the market would simply be taken into account in the main assessment). In the Gateway Basel North joint venture merger case in 2019, the Commission found that although the JV would eliminate competition in some container services, it would enhance competition in others, and cleared the JV on this basis.[16] In Germany, the Bundeskartellamt[17] may clear a merger "if the companies prove that the concentration will also have pro-competitive effects on a different market ("improved market"). The improvements must outweigh the negative effects on the market in which dominance is created or strengthened ("impaired market")."[18] This condition applies only to out-of-market efficiencies of a structural nature leading to increased competition in the improved market. The Bundeskartellamt has, for example, cleared a merger that likely would have anti-competitive effects in the cable TV market, because of pro-competitive effects in other telecoms markets.[19]

2.3.3. Horizontal agreements

Efficiency claims could also be brought to exempt or justify horizontal agreements between firms that would otherwise be prohibited as anti-competitive. In principle, the same considerations apply as for mergers: a defined group of consumers may be harmed by the agreement (and for the purposes of this paper, it will be assumed they are) but the agreement could produce benefits, some of which may relate to different markets. This will be considered (if the jurisdiction allows for it) in a different legal framework from mergers.

Box 2.2. The 'fair share' in the EU and consumers who are 'substantially the same'

In the EU, Article 101(3) TFEU imposes four conditions, all of which must hold, to consider a restrictive agreement to generate objective economic benefits that outweigh the negative effects of the restriction of competition, and exempt those agreements from the general prohibition:

1. it must contribute to improving the production or distribution of goods or to promoting technical or economic progress;
2. consumers must receive a fair share of the resulting benefits;
3. the restrictions must be essential to achieving these objectives; and
4. the agreement must not give the parties any possibility of eliminating competition in respect of substantial elements of the products in question.

Condition 2, the fair share, does not specify whether those consumers need be in-market consumers but the EC's general Guidelines on exempting horizontal agreements from the Article 101 prohibition, clarify that: "*Negative effects on consumers in one geographic market or product market cannot normally be balanced against and compensated by positive effects for consumers in another unrelated geographic market or product market. However, where two markets are related, efficiencies achieved on separate markets can be taken into account provided that the group of consumers affected by the restriction and benefiting from the efficiency gains are substantially the same*".

This rules out most OOM efficiency claims, although in any event, the EC has not formally accepted any Article 101(3) efficiencies claims, in-market or out of market since the 2004 Guidelines (but not primarily because of the fair share criterion), as (Brook, 2022[11]) notes.

In 2023, the EC issued new Guidelines that confirm this language, including for agreements relating to sustainability benefits, as will be discussed in Section 4.

Source: Brook, (2022[14]), Non-Competition Interests in EU Antitrust Law: An Empirical Study of Article 101 TFEU.

Again, international practice varies widely as to whether OOM efficiencies can be considered to permit horizontal agreements. Guidance and decisions do not always clearly distinguish in-market and OOM effects. Further complicating the picture, competition authorities can decide to balance OOM and non-competition objectives through decisions on which cases to pursue at all, so their approach need not show up directly in casework.

Some jurisdictions, such as the US, allow no such exemptions. Many, particularly in Europe, require that harmed consumers should receive a 'fair share' of the gains from efficiencies, which has generally been taken to require full compensation for harm suffered. The only exemption is when consumers in the harmed market and that benefitting from the efficiency are "substantially the same" (Box 2.2). This criterion has been much debated lately, with reference to sustainability agreements, as will be discussed in Section 4

Outside the EU, the UK's Guidance on Horizontal Agreements, updated in 2023 requires a 'fair share' but does not use language of 'substantially the same'.[20] Turkey's guidelines on horizontal agreements make clear that its approach is aligned with the EU's, requiring that "*the consumer group affected by the restrictions and the efficiency gains is substantially the same.*"[21]

Japan's Guidelines for Exclusionary Private Monopolization under the Antimonopoly Act state that "*the efficiency improvements will be taken into account when […] it is deemed that outcomes such as a decline in the prices of products, an improvement of product's quality, and a supply of new products are returned to users due to the said improvement of efficiency, and the welfare of users is improved.*" This appears to rule out OOM efficiency claims unless the in-market effects are sufficient to compensate users.[22] In Mexico,

the Federal Economic Competition Law requires "*the net contributions to consumer well-being derived of such practices outweigh their anticompetitive effects*", which again presumably implies full compensation.[23]

Again, jurisdictions applying standards closer to a total welfare standard are more likely to consider such OOM efficiency claims in agreements, but rarely identify them as such, since the task is more to assess the agreement in the round. The ACCC, for example, approved an agreement among electricity purchasers to pool their demand for renewable electricity on the grounds that any harm to competition was minimal given the low market shares of the companies involved and the environmental benefits from increased use of renewables.[24]

2.4. The role of market definition and its effect on substantive decisions

In jurisdictions that exclude OOM efficiency claims, the market definition exercise determines the scope of efficiencies that can be considered. However, approaches to market definition have changed over the years, implicitly changing the approach to OOM efficiencies. This can profoundly affect the scope of efficiency claims, in jurisdictions restricting such claims to an affected relevant market.

One change may be that markets are often more narrowly defined than they used to be. For example, a market definition boundary may be drawn around just customers harmed by price discrimination, which could lead to the exclusion of any compensating gains to other consumers. In the US specifically, supply-side substitutes are no longer considered to be in the relevant market but rather considered an entry constraint. Commentators such as Werden (2017[11]) and Wilson and Klovers (2021[15]) suggest that what the courts considered to be in-market in the foundational PNB case ruling could be considered OOM today.

There is nothing necessarily wrong with this evolution in market definitional practice, but it may imply that OOM efficiency claims have become harder arbitrarily, rather than as a deliberate policy choice.

Furthermore, many jurisdictions place less weight on market definition than they used to. Market definition is a tool, not an end in itself and the use of techniques such as Upward Pricing Pressure (UPP) can allow assessment of competitive constraints without defining sharp market boundaries. For the assessment of SLC (or another competition matter) it may not matter precisely where the boundaries of the market are drawn, so long as all competitive constraints are properly considered.[25] However, if OOM efficiency claims are absolutely ruled out, then any sharp line drawn by market definition will be determinative.

For example, the EU's draft Notice on Market Definition states that the Commission "*may leave the market definition open"* and that when it does so*, the Commission usually carries out the competitive assessment for all plausible alternative market definitions [...]."*[26] It is not clear how jurisdictions that leave the market definition open would deal with a later efficiency claim that might or might not be out-of-market, depending on the precise market definition. For example, should the market definition be reassessed, to crystalise it?

This less 'bright line' approach to market definition would be consistent with adopting a more flexible approach to accepting OOM efficiency claims, but in practice those jurisdictions that exclude such claims have not done so.

A related concern is that decision-makers in jurisdictions in which OOM claims are excluded may seek to reverse-engineer a wide market definition, to avoid being prevented by the any-market rule from taking those claims into account.[27] (Salop et al (2022[16]) believe that this is precisely what the US Supreme Court did in a case involving two-sided markets, as will be discussed in Section 2.5.

2.4.1. Future markets

Markets are defined in time as well as in space and by products. In principle, therefore, future benefits could be treated as an OOM efficiency when considering present anti-competitive harm and vice-versa.

In predatory pricing cases, existing consumers typically receive benefits, while future consumers pay the cost. Other exclusionary abuses might have little or no effect 'today' but might harm competition in future, as would for example a 'killer acquisition' of a small innovative company not presently in the same market as the large digital firm acquiring it. An innovation theory of harm in any merger supposes costs on future consumers, but could involve efficiency claims today.

In practice, such cases are not treated usually as comparing welfare in two markets. The gap between 'now' and the future is usually envisaged as no more than a few years. However, as the time over which consumers are assumed to wait for the future benefits lengthens, it becomes more and more plausible to treat the two periods as separate markets (or to consider that the two groups of consumers involved are no longer 'substantially the same'). Thus, imminent efficiencies might be treated as in-market, while more distant future benefits might be considered out-of-market and ruled out of consideration in many jurisdictions. Again, this creates a bright-line distinction between what can be considered as efficiencies and what cannot, based on what may be an uncertain market definition.

When it comes to some environmental efficiencies in particular, the effects may persist over very long periods of time, raising a question of whether future consumers should be considered OOM and also, as a practical matter, whether their welfare should be given equal weight to existing consumers. Such long run considerations will be discussed in Section 4.3.2.

2.4.2. Upstream markets: monopsony power and labour markets

Through monopsony power, firms may be able to purchase labour and other inputs at below-market prices. When such harm to labour markets is considered by competition authorities and courts, the question arises about possible downstream consumer benefits from lower prices.

However, as (Alexander and Salop (2023[17]) point out, drawing on Hemphill and Rose (2017[18]), such benefits are out-of-market and even though they accrue to 'consumers', these should no more be weighed against the harmed parties' interests than any other OOM benefits (and therefore disregarded entirely in jurisdictions in which such claims are excluded).[28]

Jurisdictions differ on whether they consider upstream harm to be a competition concern in itself, or whether they require evidence of resulting consumer harm – but a jurisdiction's approach to OOM efficiency claims seems a rather arbitrary way of deciding this fundamental policy question.

2.5. When is an efficiency claim 'out of market' for a multi-sided market?

As discussed by the OECD (2018[6]), a multi-sided market (or for simplicity from now on, a two-sided market) is a market in which a firm acts as a platform and sells different products to different groups of consumers, while recognising that the demand from one group of customer depends on the demand from the other group(s). Pricing and other costs and benefits to users across the two sides will usually be linked. Quite often, the operator of the two-sided market will end up, either by choice or through competitive pressures, imposing different prices on the two sides. Changes in competitive conditions, whether from a merger or from conduct, will change the structure of prices, compared to a counterfactual without the merger or conduct. This will often result in prices increasing on one side of the market and decreasing on the other.

There are many types of two-sided markets and some – such as newspapers which carry advertising – have been around for a long time. However, two kinds of two-sided market have been particularly prominent in competition enforcement in recent years: interchange fees on payment card purchases and digital platforms.

The OECD's introduction to the 2017 discussion rightly states that *"One might ask whether it really matters whether we define a two-sided market or two 'interrelated' markets, as long as we identify that these each require an analysis of the interrelationship, and hence recognise that each differs from a traditional one-sided market. For the purposes of a competitive assessment that is right."*[29] This reflects a widespread view among economists that either approach works as long as the links between the two sides are properly considered. The same document goes on to note *"However, whether the relevant market is two-sided or consists of two interrelated markets may make an important difference in a legal sense in some jurisdictions."*

In any jurisdiction that restricts OOM efficiency claims, changes in the balance of cost and benefits across the two sides of a two-sided market are likely to be treated asymmetrically, unless it is defined as a single market.

This could apply to any multi-sided market, such as digital platforms. Platform providers, such as Apple, argue that their control of app stores is necessary to benefit all users, even if they impose costs on some app developers.[30] As of now there have not been cases involving digital platforms in which the combination of market definition decisions with OOM efficiencies doctrine has been determinative. However, this combination *has* been important for interchange fees on payment cards, a two-sided market in which merchants (usually) effectively pay fees when accepting cards, fees that flow to issuer banks or cardholders. [31]

- When the EC assessed Mastercard's multilateral interchange fees on merchants (and thence possibly passed to end-consumers), benefits to the latter or to the payment system as a whole were not considered to justify this practice, in part because two separate markets were defined: services to merchants and services to cardholders.[32]
- In the US, the Supreme Court allowed American Express's (hereafter Amex's) charges to merchants, in part because it took account of wider benefits, in what it defined as a single credit card market encompassing both sides of the market.[33]

There are many other differences between the two cases, or course (Mastercard's is a 4-party scheme involving agreements with banks, while Amex's is not) but on the face of it, a different approach to market definition led to entirely different outcomes.[34]

As Rochet and Tirole (2011[19]) showed, interchange fees can promote efficiency by compensating for externalities arising from the use of payment cards. This will raise prices to some (usually merchants) and decrease them for others (usually issuer banks and cardholders), compared to a no-agreement world.

Decision-makers and commentators have taken very different positions on the substantive issue at stake here: whether interchange fees paid by merchants are (in one view) premium prices illegally resulting from a collusive agreement or (in the opposite view) efficient outcomes of a system which benefits all participants overall, as well as all shades of opinion in-between. These views need not coincide with views on out-of-market efficiencies, but they often do.

In the EU, the decision to define two markets led to a focus on the merchants paying higher fees than they would have done, Advocate General Mengozzi 's opinion stating that: *"It is the consumers that suffer the harm caused by the restrictive effects of the agreement at issue that must, in principle, be allowed, as compensation for that harm, the fair share of the benefit resulting from the agreement referred to in article 81(3) EC."*[35]

As the UK Supreme Court noted, in an appeal relating to follow-on damages claims from that judgment: *"The merchants are the consumers of the services which are subject to the restriction of competition, and are therefore the consumers which the second condition is presumably intended to protect. If the merchants are not fully compensated for the harm inflicted on them by the restrictive measure, it is difficult to see how they can be said to receive a "fair" share of the resultant benefits."*[36]

The ECJ in Mastercard left open the possibility of consumers receiving "appreciable objective advantages" (para 234), which may be less than "full compensation".[37] However, it concluded that any advantages for the consumers on the connected market cannot in themselves sufficiently compensate for the restrictive effects, unless consumers in both markets are substantially the same.

In contrast to this assessment, the 5-4 majority US Supreme Court decision in *Amex* found the two sides of Amex's payment card business to be part of the same market, so harm to merchants resulting from Amex's 'anti-steering' restrictions could be traded off against resulting benefits to cardholders or the efficiency of the payment card system more generally. The Court concluded that the two sides should be in the same market because: (1) activity on the two sides was always joint, simultaneous, and in fixed proportions; (2) the two sides were connected by "more pronounced" network effects and interrelation of demand and pricing; and (3) *"[o]nly other two-sided platforms can compete with a two-sided platform for transactions*"[38] (US Supreme Court, 2018[20]).

The four justices supporting a dissenting opinion, authored by Justice Breyer, made clear that market definition and the treatment of OOM efficiencies was at the root of the split decision, arguing that the appealed Decision had correctly identified a market just for merchant-related services. [39]

Defining a single relevant market for both sides of a 'transaction market' is reasonably mainstream among economists, as set out for example by Filistrucchi et al (2013[21]).[40] However, that general consensus does not mean that economists are signed up to the Court's three conditions quoted above: there are numerous counter-examples that meet some or all of the Court's conditions but are clearly separate markets, or non-transaction markets that meet the criteria and so on.

Salop et al (2022[16]) and other commentators have suggested that the market definition was contrived in order to be able to consider both sides of the market. Whether the Court's decision was right or wrong, market definition works best as a useful analytical tool and it is not useful if it is retro-fitted to allow a given approach to assessing efficiencies.

A hard line against accepting OOM efficiencies places great weight on the definition of the relevant market. Unfortunately, for many two-sided markets, as the OECD noted, economic principles do not unambiguously lead to a clear answer on that and – analytically speaking – it really should not matter very much. Such weight may be more than the analytical framework can bear.

3 The pros and cons of OOM efficiency claims

Should OOM efficiency claims be allowed, or at least allowed in certain circumstances? The argument in favour is obvious: everyone's welfare counts[41], so why not? The answer to that 'why not' question is where the debate lies and there are several reasons, which this section will explore. Some jurisdictions have made a unique exemption to their general prohibition on OOM efficiency claims, for agreements relating to environmental outcomes and that will be discussed in Section 4.

3.1. Why restrict or exclude OOM efficiency claims?

Competition authority guidelines and cases across jurisdictions vary greatly in how they address the question of OOM efficiencies. They do not always deal with them explicitly – and case law is often lacking, not least because it is so rare for mergers or anti-competitive agreements to be approved on the grounds of any kind of efficiency claim.

For the reasons noted above, explicit restrictions on considering OOM efficiency claims are mostly found in jurisdictions applying some kind of consumer welfare standard, or those that accord a particularly heavy weight to competition itself, as a process of rivalry. It is very common for guidelines and legal precedents to reject in principle the idea that harm to consumers from lost competition in one market can be compensated by gains to other consumers, in another market. Various reasons have been advanced for this restriction, which could be summarised as:

1. non-welfare objectives (competition as a value in itself);
2. the 'slippery slope to monopolisation'
3. pragmatic objections about complexity and the cost in competition authority resources; and
4. related to the above, a concern that investigated parties' information asymmetry would be strengthened, leading to anti-competitive conduct being cleared.

3.1.1. Non-welfare objectives (competition as a value in itself)

A competition authority or court applying a pure 'do no harm to competition' standard would be consistent in excluding any OOM efficiencies. Even in jurisdictions with a welfare standard of some sort, the process favours a 'do no harm' default. Excluding OOM efficiencies can be seen as part of that stance.

However, a rigid 'do no harm' approach is very limiting for a policymaker. Some might argue that competition authorities, lacking the legitimacy of general government, *should* be so limited – as will be important when considering environmental benefits. In practice competition authorities and courts have to decide on winners and losers to some extent.

3.1.2. The slippery slope

One of the two most commonly-applied arguments against taking account of OOM benefits is the ‘slippery slope’ that to do so will lead to widespread monopoly, or at best duopoly, as the US Supreme Court stated in its PNB decision: “*the logical upshot would be that every firm in an industry could, without violating § 7, embark on a series of mergers that would make it, in the end, as large as the industry leader*”.

This ‘slippery slope’ argument arises from a worldview in which being large or achieving monopoly rents in one market necessarily creates a more effective competitor in others. However, the circumstances in which it will this is true will be rare. Economies of scale are by no means universal and even if when they are present, they do not trump all other factors. Facing an efficiencies claim arising from economies of scale, a competition authority would always conduct a balancing exercise in which harm to competition in one market is assessed against increased competition arising from scale in others. There is no reason to think that this balancing exercise would remain positive all the way through a sequence of mergers that would leave the industry as a duopoly.[42]

The argument is reminiscent of the ‘national champions’ idea that by monopolising the home market, a firm can become more competitive abroad, which has been widely discredited: there is more to economic success than economies of scale and scope.

A similar argument could be made in a dynamic context. We could imagine firms claiming that by merging they would enhance innovation, to the benefit of all consumers in the future. However, competition authorities can be expected to be sceptical of that, too. Many would find it more plausible that lost competition would lead to reduced innovation.[43] Again, although on a case-by-case basis there may be occasional reasons for such a story to be plausible, it is not of general applicability, so there is no reason to think that it would lead to widespread monopolisation.

3.1.3. Pragmatic concern for competition authority resources and advantages for investigated firms.

This leaves the pragmatic argument: the task of assessing and weighing such benefits would be difficult, to the detriment of the competition system. This added complexity could harm enforcement in two ways:

- It could use competition authority resources, that could be deployed to benefit consumers in other cases and activities.[44]
- It could provide advantages for investigated firms, increasing the scope for them to benefit from their asymmetric information against the investigating competition authority.[45]

Some commentators such as Rybnicek and Wright (2014[22]) dismiss this as an out-of-date concern, expressing faith in the ability of modern methods of economic analysis to deal with such complexity, stating “*This criticism also no longer holds in light of the antitrust agencies’ experience and the modern economic toolkit available to evaluate efficiency claims*.”[46]

In retrospect, this confidence in empirical techniques seems premature. Modern economic techniques have not turned the tasks faced by competition authorities into simple mechanical exercises, nor have they reduced the complexity or the controversy involved in competition decisions. Case duration, decision length and the duration of legal appeal have generally increased, not decreased, since 2014.[47] Competition authorities and courts continue to find efficiencies arguments difficult to evaluate, as the assessment of such arguments usually involves predictions about the supply side that the parties are in a better position to evaluate than the competition authority itself (hence the practice of putting the burden of proof onto those parties). The objection that taking account of OOM benefits would add to the complexity that competition authorities face therefore seems still to stand.

Equally, however, taking account of such benefits need not lead to a huge uplift in the demand for resources or to competition authorities being overwhelmed. Some commentators opposed to considering OOM efficiencies seem to overstate the complexity that is involved. (Baker, 2019[10]) suggests "[…] *there may be no principled stopping point short of undertaking what is unrealistic if not impossible: a general equilibrium analysis of harms and benefits throughout the entire economy*." However, in practice opening up to OOM claims does not equate to maximising welfare overall; instead, it involves considering one or a few additional reasons to reconsider a finding of harm, putting the burden of proof on the parties to provide evidence. Competition authorities and courts in the UK and Germany, which firmly apply consumer welfare standards but are open to OOM efficiency claims in some respects, do not conduct anything resembling a general equilibrium analysis.

The overall state of competition and the structure of the economy in jurisdictions that are more open to such claims for OOM consumers[48] do not seem notably different from those that exclude them, perhaps because few efficiency claims of any sort succeed and perhaps because such claims are treated as rare exceptions, not the extension of analysis beyond limit feared by some opponents of OOM claims.

3.2. Proposals for liberalisation in jurisdictions excluding OOM claims

A proposal simply to treat OOM efficiencies the same as in-market efficiencies is unlikely to catch the mood of the times: it would involve clearing more mergers and approving more conduct. As Baker (2019[10]) concludes: "*Given that today's dominant error-cost problem is the reverse – insufficient deterrence of anti-competitive conduct – and given the need to protect political support for antitrust, there is now even less reason to revise antitrust law's general prohibition against cross-market welfare trade-offs*."[49]

However, there are some proposals for limited exceptions to the general rule, particularly in the US (in Europe, the debate is more around whether environmental benefits should receive special treatment, as will be discussed in the next section). Yun (2022[23]) provides a comprehensive set of proposals which can serve to structure the discussion, although others have proposed some similar changes. He suggests four circumstances in which OOM efficiency claims should be considered:

- where there are economies of scope in production,
- upstream and downstream markets within the same supply chain,
- multisided platforms with indirect, cross- group network effects,
- between markets for products which are complements in demand.[50]

3.2.1. *Economies of scope*

The first of these can be seen as a generalisation of the concept of 'inextricability': when products are produced under conditions of economies of scope, it will be inefficient to separate production of them and in an extreme case the two may be inextricable. As noted above, in principle this is not different from accepting OOM efficiencies claims in general (as it would always be preferable to impose remedies carving out the harm whenever that is possible), but in practice this could be a limited exception, when the lost efficiencies from prohibiting the merger would be large.

3.2.2. *Upstream and downstream markets within the same supply chain*

The second condition is presented by Yun as a recognition that vertical cases frequently involve gains at one level and harm at another and in practice competition authorities already consider such trade-offs, even though these are rarely considered out of market' efficiencies. [51] However, the proposal is not simply an endorsement of existing practices. Although the language of OOM efficiencies is rarely used to describe such vertical cases, in practice most competition authorities require that gains at an intermediate level

must lead to overall gains to end-consumers. Furthermore, as noted above, some have argued that competitive losses upstream in the supply chain should not be traded off even against gains to end-consumers.[52]

3.2.3. Multi-sided platforms

Yun suggests explicitly allowing OOM efficiencies when considering two-sided platforms, essentially to avoid the stark effects of market definition exhibited in the interchange fee cases described above. In this, he is not alone, as noted above: several commentators have argued for a limited exception to be made to the rules against OOM efficiencies, to avoid cases involving multi-sided platforms turning on market definition. Ducci (2016[24]) makes a similar argument in the EU context, suggesting that it makes little sense to disregard benefits on one side of a two-sided platform and generalising from this to argue that consumer welfare overall should be the goal, implying a wider acceptance of OOM efficiency claims.

3.2.4. Complements in demand

Like Orszag and Smith (2016[25]), Yun suggests that OOM efficiencies should be considered when the products in question are complements in demand. This is perhaps the most radical of Yun's proposals as to some extent it brings in the EU (and other jurisdictions') concept of substantial similarity in the customer base.

This equivalence can be seen most easily in the extreme case of products that can only be consumed together, such as phone handsets and telecommunications services. Some conduct might raise the prices of handsets, for example by reducing competition in handset production, but through efficiencies reduce the prices of telecommunications services, for example because of synergies between the handset technology and the services that technology receives. In this case, the two price changes are indeed interdependent, so harm to handset buyers could be counterbalanced by benefits to substantially the same people.

Even in the weaker case when complementary products can be consumed apart or together, there is likely to be overlap in the customer base but if the provider can price discriminate, it will solely be those consumers who use both that are targeted for price cuts. Allowing OOM efficiencies claims for products that are complements in demand would therefore often be similar to requiring that the consumers of both be substantially the same. An equivalent policy would therefore be to focus on net harm to groups of consumers, across markets.

4 Should out-of-market environmental efficiency claims be treated differently?

All of the previous discussion applies to environmental OOM claims, as much as it does to more standard efficiencies reducing prices, raising quality and so on. Such environmental claims will almost always involve gains outside the harmed market, particularly when the benefits accrue, in effect, to everyone. Several competition authorities have put out guidelines or statements creating or suggesting a specific exemption from a general requirement that harmed consumers be fully compensated, for certain kinds of environmental benefits in horizontal agreements. Evaluating environmental and some other social benefits may also be more difficult for competition authorities than the already difficult task of evaluating more traditional efficiency claims.

For all of these reasons, it is worth separately examining the treatment of environmental and related OOM efficiencies. After a brief overview of existing practices, this section discusses whether there is a case for an environmental exemption, in jurisdictions otherwise hostile to OOM efficiency claims, and how such claims could in practice be treated.

4.1. Existing practice

Efficiency claims are not restricted to price or similar direct benefits, so there has been scope for claiming efficiencies related to environmental and other broader gains, whether in-market accruing to affected consumers or, in those jurisdictions allowing it, out of market. However, in recent years there has been more debate over such as approach, whether as a result of more pressing environmental concerns or a view that competition law enforcement is too narrow and needs to be more aligned with society's interests.

Considering OOM efficiencies can be a part of that process, albeit a part limited to approving otherwise anti-competitive conduct or at least modifying the remedies for such conduct.[53]

4.1.1. Mergers and the public interest

In principle, claimed environmental benefits need be treated no differently from any other efficiency claim. Some jurisdictions, open to OOM efficiencies claims within the normal merger assessment framework, can consider environmental claims in that same framework. For example, in 2023 the ACCC in Australia authorised a merger in the electricity sector, with behavioural commitments, despite its longstanding policy of resisting vertical integration, because it accepted the claim that the merger would lead to a faster and more comprehensive transition to renewable generation than would have been the case without it.[54]

However, in many jurisdictions such matters are dealt with through public interest considerations that may not be integrated into the competition authority's merger review process. The OECD's discussion of public interest considerations in merger control found that jurisdictions differed in:

- Substance: what factors can be considered, including for example: national defence in many countries, exports in Australia, media plurality in the UK, industrial development in France, employment and the interests of previously disadvantaged groups in South Africa.
- Decision process: whether these factors modify a competition decision or are assessed in parallel.
- The institutional arrangements, as some jurisdictions consider these factors as part of the competition assessment, by the competition authority, as in the People's Republic of China, while in others they are matters for other public bodies, over-riding competition authority decisions (in Germany or the UK) or even pre-empting them (such as in Israel, Hungary and Canada), or in some cases acting concurrently.[55]

The background paper to that roundtable found that many of these public interest interventions acted as acceptance of "efficiencies" arguments to allow a merger and most of the examples imply these efficiencies were outside the market affected. For example, German and Spanish approvals of energy mergers to create national champions, against the advice of competition authorities, were presumably held to benefit the economy as a whole, while likely harming domestic energy consumers through reducing competition.[56]

A minority of such interventions involved the opposite: *blocking* mergers that would otherwise have been *cleared* – this is particularly the role of investment reviews. These are out of scope of the present paper.[57]

4.1.2. Agreements and abuse of dominance

Other public policies can also affect otherwise anticompetitive agreements and abuse of dominance concerns. In particular, most if not all jurisdictions permit conduct that is mandated or authorised by a law or regulation, or which is (strictly) necessary in order to comply with a law or regulation. State action of this sort is beyond the scope of this paper. Here, we are concerned with claims of OOM efficiencies relating to environmental factors, that could cause agreements to be exempt from being in breach of competition law.

In a chapter on sustainability (environmental) agreements in EU 2023 Guidelines, the EC has confirmed retaining its 'substantially the same' language defining the only exception to its general exclusion of OOM efficiency claims.[58] Consequently, efficiencies produced by sustainability agreements can only be accepted if they fully compensate harmed consumers (but see earlier EC practice, Box 4.1). This might occur if either the benefits arose in-market or if the harmed consumers were also the substantially the same as those benefitting, even if the benefits arise in a different market. However, the new Guidelines therefore rule out accepting a sustainability agreement in which the harmed consumers are not fully compensated, on the grounds of benefits to *other* consumers or citizens more generally.

Box 4.1. Accepting OOM environmental benefits claims – EC practice before 2003

Before the entry into force of Council Regulation (EC) No. 1/2003 the EC frequently accepted efficiencies claims for exemption on a wide range of non-competition grounds.

In CECED (1999), the EC allowed an agreement between the makers of washing machines to increase standards for energy efficiency beyond regulatory requirements. The decision dealt with efficiencies in two sections. First, it found that purchasers of the initially more expensive machines would pay less for electricity and concluded that this would quickly pay back higher costs of machines. This is an in-market efficiency. However, it separately considered environmental benefits from reduced emissions of gases contributing to acid rain, concluding:

"*On the basis of reasonable assumptions, the benefits to society brought about by the CECED agreement appear to be more than seven times greater than the increased purchase costs of more energy-efficient washing machines. Such environmental results for society would adequately allow consumers a fair share of the benefits even if no benefits accrued to individual purchasers of machines*".

The inclusion of the phrase 'even if no benefits accrued to individual purchasers of machines' in principle implies an OOM efficiency: the interests of the wider population could outweigh harm to the purchasers of more expensive washing machines. In practice, the EC also found that harmed consumers gained directly from lower energy costs, so the agreement was exempted on within-market grounds.

The EU's subsequent 2004 Guidelines ruled out such balancing, except in circumstances when the consumers are "substantially the same".

Source: 2000/475/EC: Commission Decision of 24 January 1999 relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (Case IV.F.1/36.718.CECED).

This approach is controversial. Legal commentators disagree on whether the TFEU *enables* the EU to balance competition against non-competition objectives[59] but this EU specific legal debate is not relevant to the wider international community. However, the debate on principles is relevant. Some competition authorities in Europe have taken a different approach, on the principle that full compensation of harmed consumers should not be required of the efficiencies produced by certain kinds of environmental agreements:

- The ACM in the Netherlands, in its Policy Rule on when it will pursue action on sustainability agreements, draws a distinction between most kinds of sustainability agreements and 'environmental-damage' agreements, which are defined as agreements that contribute efficiently to compliance with an international or national standard or to the achievement of a specific policy objective to prevent environmental damage, noting that the latter may involve consumption that produces negative externalities. The ACM has set a specific prioritisation regime for environmental damage agreements, by which it will not further investigate if such agreements meet certain criteria, including that the total benefits must outweigh the negative effects and the consumers in the relevant market receive an 'appreciable and objective' advantage of the benefits. This is a change to the ACM's position in previous draft Guidelines, which did not specify that consumers in the relevant market must receive an 'appreciable and objective' advantage of the benefits from such agreements. Consequently, ACM does not require those consumers to be compensated fully. This is because their consumption imposes costs on the rest of society (following the 'polluter pays' principle). At the same time, OOM benefits can be taken into account for the total benefits. In this way, the ACM (indirectly) provides more room for OOM benefits and thus also for potentially anticompetitive environmental damage agreements.[60]

- The FCA in Austria issued Sustainability Guidelines following amendment of the cartel law to create a unique 'sustainability exemption' for domestic cartels, when considering OOM efficiency claims. This deems consumers to enjoy a 'fair share of the benefits' if 'those benefits contribute substantially to an ecologically sustainable or climate-neutral economy.' [61]
- The HCC in Greece has not issued sustainability guidelines, but it has published a staff paper setting out its thinking on sustainability agreements. Citing Lianos (2018[26]), the staff paper sets out some very broad considerations for competition law application and suggests that the existing EU 'fair share' criterion "may still work as long as it is carried out looking at the affected users as a whole and not just a subset of those, i.e., directly affected by the restrictions of competition." [62]
- Outside the EU, the CMA in the UK issued guidelines relating to sustainability agreements in October 2023. In discussing 'the fair share' these guidelines require that consumers be 'substantially the same' for most agreements, and even for environmental agreements in general but explicitly modify this position for climate change agreements (which the draft defines). For those the CMA considers it appropriate to "exempt such agreements if the 'fair share to consumers' condition can be satisfied taking into account the totality of the benefits to all UK consumers arising from the agreement, rather than apportioning those benefits between consumers within the market affected by the agreement and those in other markets.".[63]

Outside Europe, the JFTC in Japan published *Guidelines Concerning the Activities of Enterprises, etc. Toward the Realization of a Green Society Under the Antimonopoly Act*[64] in March 2023, providing a thorough guide to the forms of agreements that would breach the law and those that would not, for several types of agreement such as joint ventures, R&D co-operation and so on, along with advice on when and how to consult the JFTC. The Guidelines do not appear specifically to deal with OOM efficiencies but refer several times to the interests of 'general consumers', for example in benefitting from emissions reductions and the case examples seem to indicate some weighing of direct harm against general benefits. [65] This suggests that OOM efficiencies can be taken into account, but that the interests of directly harmed consumers are given more weight than consumers outside the directly affected market.

The remainder of this section discusses whether there is a case for an 'environmental exception' for sustainability agreements, under which OOM efficiencies are taken into account and harmed in-market consumers need not be fully compensated. This is a live policy topic at the time of writing: the ACM and CMA issued their final documents only in October 2023. The ACM's 2023 Policy Rule is a much shorter document than its earlier two draft Guidelines and substantively different in some ways as it follows publication of the EU's Guidance and seeks to align the ACM's position with that Guidance. The rest of this section makes use of some ACM documents that have been superseded and clarified by the final Policy Rule, as those documents illustrate the principles even if they no longer reflect ACM's approach.

4.2. Should competition authorities consider environmental efficiencies as a reason for allowing anti-competitive agreements that would otherwise be prohibited?

On the face of it, the arguments against considering OOM efficiency claims in general, set out in Section 3above (competition as a value in itself, the 'slippery slope' to monopolisation and practical difficulties that could consume resources and tilt the assessment in the investigated parties' favour) apply just as much to environmental benefits as to others. Indeed, concerns about practical difficulties arising from the complexity of the analysis required are probably greater. So OOM environmental efficiencies are no easier to accommodate than others; the question is rather whether there should be a specific exemption because of their importance.

The dilemma can often be avoided. Most agreements will not create any consumer harm, others may provide such large or focused environmental efficiencies that all consumers are better off, including those harmed by lost competition. Furthermore, some agreements could be altered to provide the benefits without causing the harm. Others may meet the criterion of the harmed and benefitting consumers being substantially the same. For example, climate change improvements benefit everyone, so the harmed consumers will benefit to some degree and if those harmed consumers are also ‘everyone’, or nearly so (for example in agreements in the fuel or electricity markets) then the two groups are substantially the same.

However, this will not be true for an agreement relating to products causing disproportionately high emissions, consumed by a few people (such as business class air travel), as the proportion of benefits received by those few people is unlikely to compensate them for higher prices.[66]

Sometimes, therefore, the dilemma cannot be avoided: an agreement will produce general benefits, perhaps to consumers overall, but cause anti-competitive harm to *some* consumers. Then someone must decide whose interests will prevail. It is only these rare, difficult conflicts that this paper considers, discussing in turn:

1. **Principles**: whether competition authorities are well-placed to make such a trade-off.
2. **Practice**: whether taking account of environmental and similar OOM efficiencies improves outcomes – for the environment or for competition.
3. The role of **externalities**; and
4. **Geographic scope**: the treatment of foreign consumers or citizens.

4.2.1. Principles: is a competition authority well-placed to decide when environmental benefits justify allowing anti-competitive harm to some consumers?

A decision either to accept or reject any OOM efficiencies claim will often result in some people gaining at the expense of others. This raises a question of what it is proper for a competition authority to decide. An agreement on minimum environmental or social standards, for example, must go *beyond* the standards required by regulation since no collusive agreement is usually required to comply with the law.[67] If government has already chosen not to impose such higher standards, how could a competition authority decide whether the costs of going beyond government-mandated are justified?

As first-year economists all learn, an easy resolution to this dilemma is to make judgements only about ‘Pareto-improving’ policies, which benefit at least someone and harm no one. Unfortunately, this provides no guide to practical policy making: it implies that any group harmed by a policy, no matter how small or disreputable, has a veto over it. In economics, the utilitarian principle of maximising welfare even when it over-rides some peoples’ interests is given effective form in the Kaldor-Hicks or ‘compensation’ criterion which suggests that a policy is justified if the gainers from it *could* compensate the losers, whether they do or not. However, this is hardly a guide to good policy either, as for most it goes too far in the opposite direction, allowing all manner of welfare-neutral or improving transfers (such as monopolisation by a perfectly-price-discriminating monopolist who can capture all consumer surplus).[68]

The compensation criterion also says nothing about *who* should be empowered to take such decisions. Central governments have many more instruments at their disposal to compensate ‘losers’ from some environmentally focused policy and are therefore much better placed to deal with distributional matters. A competition authority asked to approve an anti-competitive agreement that reduced emissions and raised energy prices, for example, would not be able to put in place support for vulnerable households but a government could.

There is also a question of legitimacy. Someone needs to decide which policy goals to pursue. Many competition experts are in favour of competition authorities supporting their governments’ policy to reduce

greenhouse gas emissions. Very few of them would be in favour of supporting those same governments' policy, when that policy is to promote national champions.[69] No doubt there would be broad consensus among competition experts that climate change policy is right and policy to promote national champions or protectionism wrong, but in democratic societies that is not for us to decide. Competition authorities too make interpersonal comparisons, but they do so in a narrow space defined by properly constituted authority, which in OECD Member states and many others derives from democratic elections.

How far that delegated discretion should extend is a matter of personal opinion. Lianos (2018[26]) discusses a very wide scope of intervention, which would extend to tackling structural inequalities, systemic resilience and abuse of regulation, while noting that he *"does not argue for the transformation of competition law into the 'law of everything'"*. In an example of a contrary position, Thomas (2020[27]) argues that competition law should pursue only competition goals, arguing that *"Otherwise, the substantive tests to be applied by the respective authorities become opaque, and the enforcers are subjected to perplexing and potentially irreconcilable tasks."*

Opinions will differ as to where the balance of principled considerations should lie but these considerations suggest that any exceptional treatment for environmental or social factors as OOM efficiencies should be defined in advance by proper authority and specifically justified as a strictly limited exception to the rule.

Indeed, this is the approach taken by jurisdictions considering a specific exemption for environmental OOM efficiencies. The CMA and ACM both explicitly cite climate change agreements (and in the ACM's case, ministerial policy) to support a ring-fenced exemption from the general principle that harmed consumers must be fully compensated. In Austria the FCA's environmental exemption for domestic cartels is mandated by law.

4.2.2. Practice: would taking account of environmental and similar OOM efficiencies in competition law enforcement really help the environment or competition?

Most of this debate concerns the principle of whether it is right or wrong for competition authorities to consider environmental OOM efficiency claims. However, there are also practical questions about whether allowing such claims would be effective.

Do horizontal agreements between firms in fact promote environmental goals effectively? When would it be more effective to pursue such goals in this way than through regulation? Is the harm to competition from such agreements significant, in practice? There is very little evidence indeed to answer such questions and in fact they are often not even asked. Proponents of extending the goals of competition law such as Ezrachi (2017[28]) and Lianos (2018[26]) generally argue on the basis that these goals are important, taking it as given that including such goals in competition law will help achieve them.[70]

In practice, such questions are usually raised by authors opposed to such broader goals, such as Schinkel and Treuren (2021[29]) who note that regulatory information asymmetry might provide a reason to prefer a policy of allowing companies to propose agreements, over direct regulatory action. A private company might know the costs and benefits of its own emissions reduction possibilities better than does government. However, they conclude that this will rarely be beneficial because this same information asymmetry makes it more likely that such an approach will enable corporate 'greenwashing' of substantial anti-competitive behaviour for little if any environmental gain.

Schinkel and Spiegel (2016[30]) use an algebraic example to demonstrate how agreements on minimum environmental or social standards can diminish investment incentives leading to lower output and lower sustainability benefits.[71] Collusive agreements could also provide rents from which private firms can afford to make contributions to sustainability: in effect, offering public good provision in exchange for cartel profits. Schinkel and Tóth (2020[31]) note that this is unlikely to result in a good deal, providing several examples and a model to demonstrate that private motives incentivise cartels to provide the minimum social benefits

for the maximum overcharge to consumers. They conclude that *"Just the availability of a 'green cartel'-exemption then undermines deterrence."*[72]

Many other commentators have argued that competition law enforcement itself will become weaker, the broader its goals become. In the self-explanatory "Competition Law is not a stopgap!", Peeperkorn (2021[32]) argues that competition law should remain focused on cases, not policy, for various reasons including the uncertainty and complexity produced by considering broader goals, but also out of concerns about greenwashing and the effectiveness of competition enforcement.[73] Citing the Tinbergen principle that each policy goal requires its own instrument, [74] he argues that pursuing wider goals *"[…] would make the application of competition law not only more complex, more costly, slower and less certain, it would also change the nature of competition policy and turn it into a defunct form of market monitoring and market regulation."*

The literature on this topic at present lacks any empirical analysis, for example of the effects of any such horizontal agreements on achieving emissions reductions, or any resulting anti-competitive harm to groups of consumers. Admittedly, some such factors are difficult to measure but perhaps the increased willingness of some competition authorities to consider them will enable ex-post assessment.

4.2.3. Which OOM efficiencies to exempt? – The role of externalities

In its Policy Rule, and more extensively in the debate leading up to it, the ACM has cited externalities from environmental damage agreements, as part of its justification for considering OOM efficiencies for those, but not other agreements. Before either the ACM or |EU guidelines on sustainability agreements were finalised, ACM Chair Martijn Snoep set out the reasons for this distinction: "*why do business class travellers need to be fully compensated for the harms inflicted by a hypothetical agreement between airlines that requires to take into account the negative externalities of flying? Therefore in the case of agreements that aim to redress these negative externalities, there is no sensible justification for requiring that the consumers need to be compensated in full for, in essence, not contributing to climate change*." [75]

The point here is largely an ethical one but relies upon economic principles too: the agreement should not be regarded as a benefit to the out-of-market consumers, that needs to be justified, but rather as merely the ending of an unjustified harm to them. Such an agreement could be economically efficient,[76] in that it eliminates an externality, potentially raising prices towards the social optimum, rather than above them as we normally think of cartels as doing.

Although ethically appealing, this principle does not directly deal with the largely pragmatic objections to considering OOM benefits. All agreements resulting in net overall gains from OOM benefits are efficiency-improving, in that they maximise welfare, so it is hard to see that this justifies acceptance of environmental OOM efficiencies claims, while preserving a prohibition on other OOM efficiencies claims. For example, an efficiency claim based on a pro-competitive effect in another market, for example by making entry more likely, would also remove a market failure. In any event, a collusive agreement is usually a bad solution to a market failure.

The use of externalities therefore seems useful mainly as a reminder of where responsibility lies, as part of an ethical argument for treating certain environmental agreements differently, than a practical means to determine which OOM efficiencies should be considered or how.

4.2.4. Should the welfare of anyone outside the national jurisdiction be considered?

What of benefits accruing to foreign consumers? In general, competition authorities do not formally consider either costs or benefits to people outside their jurisdictions in their case work and some jurisdictions even explicitly permit export cartels.[77]

Discussing the treatment of global greenhouse gas emissions reduction specifically, the ACM concluded "It goes without saying that limiting the allocation of the global benefits of CO2 reduction to the in-market EU consumers' share of those benefits would make the application of 101 (3) TFEU to CO2-reducing agreements among European producers unfeasible."[78]

As a matter of principle, economic and social objectives are best met when the costs and benefits are calculated on the same basis. Often, all costs and benefits will be within the jurisdiction, as is the case with most matters in front of competition authorities. However, many environmental agreements will have broader effects. There are nonetheless cases where most competition authorities' approach of ignoring benefits to foreigners might be appropriate, such as:

- When the firms are making products consumed globally, as the costs as well as the benefits are likely to be shared globally. If so, disregarding the interests of non-residents ignores a proportion both of the costs and the benefits. If those are roughly proportional (and they might not be), this would be correct.
- When the firms are participating in a global agreement with firms outside the jurisdiction, then again, disregarding both costs and benefits for non-residents might be a reasonable proxy for the full global assessment.

It therefore may not always be appropriate to count global benefits (or at least to do so without counting global costs). A concern of the sort raised by the ACM would be most serious when: the pollutant is global; the affected consumers live within the EU; and the agreement is only between firms located within the EU. In this case, there would be a severe mismatch between the geographic costs and benefits, if no account is taken of the welfare of people outside the EU.

In any event, of course, it would be inconsistent of the EU or any other jurisdiction to consider environmental benefits outside its geographic reach, when in general it does not permit the consideration of OOM efficiencies at all, so in practice this concern is subsumed in the wider disagreement on this matter.

4.3. Practical aspects of taking account of environmental OOM efficiencies

Competition authorities considering an environmental efficiency claim for an otherwise prohibited agreement may need to trade off environmental gains against harms over two different time periods and for two different groups of people. As noted above, this is one reason to reject even considering such claims, as the competition authority might expend excessive resources, make errors and even be taken in by ineffective and anti-competitive 'greenwashing' if it does so.

Competition authorities and competition courts are not expert in such matters, but they can draw upon other expertise within their own jurisdictions and need not 're-invent the wheel'. Indeed, OECD itself, outside its competition functions has useful guidance, on such matters, such as (OECD, 2018[33]), *Cost-Benefit Analysis and the Environment: Further Developments and Policy Use*.

4.3.1. Evaluating environmental benefits

In evaluating environmental benefits, just as for other broader social and similar benefits, competition authorities will often have to rely on non-market estimates of value, as prices are not available either because the benefits are hypothetical or, more fundamentally, because the benefits arise as externalities or public goods and therefore are not offered in market transactions.

The EU and other competition authorities have made explicit recognition of non-use benefits (such as the feeling of satisfaction one might feel from environmentally conscious consumption) and collective benefits (which arise when a group of people might benefit from a restriction on their individual choice as long as all do so), in sustainability guidelines. However, assessing these is difficult.

The economic literature on evaluating willingness-to-pay for environmental or social public goods is vast. Fortunately, the ACM and HCC have provided a public good to the competition community by commissioning a *Technical Report on Sustainability and Competition*, by Inderst, Sartzetakis and Xepapadeas on this topic.[79] After discussing relevant principles of welfare economics, the report sets out different methods of assessing willingness to pay, including revealed preferences through purchasing behaviour, where available, as well as several forms of stated-preference (survey) designs.

One basic problem in assessing environmental or other benefits is that survey respondents are unlikely to report accurate information. Unsophisticated respondents may not understand or care what value to declare in response to rather abstract questions, while sophisticated respondents may respond strategically: overstating their preferences to influence the results in their preferred direction.[80] The report discusses several approaches (such as conjoint analysis) to minimise such problems, as does Watson (2021[34]) in her contribution to the OECD Competition Committee's discussion of the topic.

Another basic problem is the sheer complexity of some environmental analysis, such as the damage functions required to estimate the shadow price (the implicit market valuation to achieve a social optimum) of pollutants such as greenhouse gases.

In practice, however, it will rarely be a sensible use of resources for competition authorities to assess these things themselves, because more expert bodies will already have done so.[81] This will certainly be the case for the more prominent environmental problems. Governments often define shadow prices for important pollutants such as acid emissions and greenhouse gases. Most OECD member states' governments have climate change related programmes or build emissions costs into the cost and benefit assessment of policy. There are also market-based estimates, provided from tradable permit markets, although as public institutions competition authorities are more likely to want to rely on government valuations.

If these measures are all already used by other public bodies it is hard to see why a competition authority would not simply adopt them rather than itself attempting to assess them. These difficulties may therefore be less of a problem in practice than is sometimes claimed. Using such public measures also improves the predictability and transparency of competition law enforcement. That leaves to the competition authority the assessment of whether and by how much a proposed agreement would in fact contribute to such wider goals but there, presumably competition authorities considering such claims could continue to apply procedural barriers, putting the burden on the proposing parties to provide evidence. The competition authority also, of course, must assess any loss of competition.

4.3.2. Discounting

Many competition law decisions involve comparison of costs and benefits at different points in time. It is in principle appropriate to use discounting to compare these, although in practice for fairly short-term horizons, competition authorities rarely bother. The EU's guidelines on Article 101(3), for example, note that "*The discount rate applied must reflect the rate of inflation, if any, and lost interest as an indication of the lower value of future gains*."

Environmental benefits, however, can involve consideration of much longer periods of time. Thus, it becomes more relevant to apply a discount rate and that discount rate may be different from the one applied in the short term. The HCC, in its staff discussion paper on sustainability, takes issue with this clause, arguing that "*This approach discounts future benefits and costs, and may be considered as biasing the analysis in favour of the present versus the next generations, unless the entire focus is put on effects on (sustainable-centred) innovation*."[82]

However, this all depends on what discount rate is chosen. When considering the welfare of a specific group of consumers, a competition authority or a court will normally use a market rate of interest, as this reflects those consumers' opportunities for altering the profile of their welfare over time. However, for OOM efficiency claims relating to society more widely, a social discount rate will usually be more appropriate. As

the HCC's concern expresses, social discount rates are generally much lower than market interest rates, precisely because they take into account the interests of future generations.

Fortunately, once again help is at hand. Most governments have a standard social discount rate to apply to public sector cost benefit analysis and some may have a lower rate for the longer term. Furthermore, shadow prices for pollutants derived from damage functions in most cases already incorporate a discounted assessment of future benefits. The finance ministry, environmental ministry or statistical service of the central government in OECD member states can usually advise on these matters. Again, therefore, competition authorities themselves probably need not themselves wrestle with questions of long-run discounting, but can align with existing government policy.

5 Conclusions

What at first sight seems a limited, technical question – having assessed harm within a relevant market, should competition authorities and courts take account of benefits outside it? – turns out to have anything but a simple answer. It raises ethical issues on which reasonable people might disagree, as well as constitutional, institutional and legal considerations that will be very specific to each jurisdiction. It is therefore no surprise that practice varies internationally, and it will no doubt continue to do so.

Nonetheless, some basic principles are clear:

- Any assessment starts by considering harm within a market and removing or avoiding that harm is the principal aim of all competition authorities. Any claims of efficiencies, in or out of market, that could modify this assessment have to surmount procedural barriers. So, considering OOM efficiencies does not require a competition authority to lose focus on the competition harm and instead seek to optimise some abstract aggregate welfare sum.
- As a result, most jurisdictions draw some distinction between in-market and OOM efficiencies in their formal rules, and perhaps all do in practice. Some draw a particularly sharp distinction so that OOM efficiencies are considered only in exceptional circumstances. Broadly speaking, these reflect either inextricably linked markets (for which it might be difficult to find a remedy to carve out the harm) or common consumers.
- Market definition can therefore play an important role, creating a boundary between permissible and impermissible efficiencies claims, which runs against the prevailing approach of avoiding dependence on the precise position of the relevant market boundary in the analysis of competitive effects. This seems particularly problematic for multi-sided markets, for which the Hypothetical Monopolist Test (HMT) test does not unambiguously lead to 'the right' market definition.
- Environmental and similar efficiencies are often 'out of market'. Several competition authorities have vigorously argued that environmental crises are so severe and urgent that environmental efficiencies deserve special treatment. Against this, others have concerns about the effectiveness of this approach, both in achieving environmental goals and its effects on competition.

In principle, allowing OOM efficiencies claims could profoundly change the assessment of mergers and agreements in jurisdictions presently restricting such claims. In practice, it probably would not. First, acceptance of any kind of efficiency claim is very rare indeed and most jurisdictions allowing OOM claims impose procedural barriers that are at least as high as for in-market claims, and usually implicitly higher. Second, where there is harm to some consumers but benefits elsewhere, remedies can often be designed to separate the two. Business and the economy do not seem to work so very differently between those jurisdictions allowing such claims and those that do not. In practice, decisions to strengthen a prohibition on such considerations or to liberalise them are unlikely to affect many cases.

Nonetheless, competition authorities might consider whether their approach to OOM efficiency claims needs modifying:

- If there were to be any move towards more consideration of OOM efficiencies in general, there is logic in considering both the demand side and the supply side in defining the rare circumstances in which OOM claims might be considered, as discussed in Section 3.2, above. However, international practice does not seem to be moving in this direction.

- It may be worth considering rephrasing any restriction on efficiency claims to refer to 'outside the harmed group', rather than using the relevant market as the criterion. This would allow greater consistency of treatment of within-market and out-of-market distributional effects and would diminish the rather arbitrary effects of market definition on whether or not to count efficiencies, as discussed in Section 2.4. It may be necessary to adjust the overall stance about 'outside the harmed group' efficiencies as a result (and to find a better name).[83]
- If not, consider an exception for multi-sided markets, so that the market definition does not determine the assessment. Market definition in such markets is not straightforward and there is no reason to think that its analytical outcome should also define whose welfare is considered in the overall assessment, as discussed in Section 2.5.
- Evidence is needed on whether approving otherwise anti-competitive agreements can effectively promote environmental goals, as discussed in Section 4 Proponents of such exemptions at present largely take such effectiveness as given, while opponents disagree largely on principled grounds. Empirical evidence of the effects of a specific sustainability agreement would be useful. If any such agreement is approved (for example outside the EU, or within the EU if the agreement meets the 'substantially the same' criterion), it would be worth building in monitoring to enable an ex-post study.
- As a purely practical matter, as discussed in Section 4.3, competition authorities may want to avoid devoting resources to themselves estimating efficiencies in most environmental agreements. Published measures of shadow prices already exist and are used in other public sector decisions. Even where they do not exist, it may be better to ask the relevant Ministry for an opinion on the environmental outcomes in a particular case, while of course reserving for the competition authority or court the final decision weighing them against competition effects.

Endnotes

[1] *Guide for Horizontal Merger Review*, at https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/guias-do-cade/GUIDE%20FOR%20HORIZONTAL%20MERGER%20REVIEW.pdf

[2] To take one example among a great many, Ireland's require that the efficiency "(a) is merger-specific, and (b) is verifiable, and (c) benefits consumers. (CCPC Merger Guidelines, https://www.ccpc.ie/business/wp-content/uploads/sites/3/2017/04/CCPC-Merger-Guidelines-1.pdf).

[3] EU Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2004/C31/03)

[4] For example, Korea's Guidelines list production efficiencies as well efficiencies benefitting the national economy, before going on to require efficiency claims to be merger-specific, imminent and "proven with near certainty beyond a mere expectation or wish" (KFTC 'Guidelines for Combination of Enterprises Review', https://www.ftc.go.kr/eng/cop/bbs/selectBoardList.do?key=2857&bbsId=BBSMSTR_000000003634&bbsTyCode=BBST11).

[5] (Hovenkamp, 2016[35]): "*[E]fficiency claims . . . are often raised but almost never found to justify a merger that has been shown to be prima facie unlawful*". (Kuoppamäki and Torstila, 2015[36]) examine all mergers assessed by the EC from 1991 to 2014 and find "*In critical cases, however, efficiency arguments appear to never have been decisive in Commission practice*." FedEx/TNT in 2016 was a later exception (but they also found sufficient competitive constraints). For agreements, (Brook, 2022[14]) notes: "*Since the Commission has not accepted an Article 101(3) TFEU defence since May 2004, it has not had the opportunity to accept non-economic benefits as the basis for an exception*."

[6] See (OECD, 2023[1]).

[7] As Meese (2012[52]) puts it, in an article broadly supporting Bork's position *"Thus, instead of involving a conflict between "producers" and "purchasers" in a single market, transactions that both raise prices and create efficiencies require antitrust policy to resolve a conflict between purchasers in the original market, on the one hand, and those in other markets, on the other."*

[8] As Werden (2014[38]) discusses.

[9] Although Bork was highly sceptical of the ability of courts to do any welfare maximisation: he argues for general presumptions, not suggesting courts should try to reproduce that analysis case by case. See (Crane, 2015[39]).

[10] Although Canada is discussing potential amendments to its Competition Act including, among others, efficiencies in merger control.

[11] Guidance on enforcement priorities for abuse of dominance cases, 2009, para 30. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52009XC0224%2801%29

[12] United States v. Topco Assocs., Inc., 405 U.S. 596 (1972).

[13] Cont'l T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 49 (1977). See (Werden, 2017[11]), for example.

[14] (DoJ and FTC, 2006, p. 57[40]).

[15] A literal reading of the UK's Merger Assessment Guidelines is that the UK takes the opposite approach, distinguishing in-market rivalry-enhancing efficiencies from customer benefits that could arise in any market in the UK. However, there is presumably nothing to stop those customer benefits arising from enhanced rivalry in those other markets, so this position is equivalent to one of being open to OOM claims (albeit they are rarely accepted, as the Guidelines note).

[16] Switzerland CompCo *Annual Report* 2019, page 6. https://www.weko.admin.ch/dam/weko/en/dokumente/2020/jahresbericht_2019.pdf.download.pdf/Annual%20Report%202019.pdf

[17] Broader economic benefits can also be considered, but by the relevant Minister, in a different procedure, not by the BkA.

[18] *Guidance on Substantive Merger Control*, at https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Leitlinien/Guidance%20-%20Substantive%20Merger%20Control.pdf?__blob=publicationFile&v=6

[19] Bundeskartellamt, Case B7-200/07 – KFG /Orion, decision of 3.4.2008, at 36, 270

[20] https://www.gov.uk/government/publications/guidance-on-horizontal-agreements Subsequent draft guidance on sustainability agreements provide a limited exemption for certain environmental agreements, as will be discussed in Section 4

[21] https://www.rekabet.gov.tr/Dosya/guidelines/7-pdf

[22] https://www.jftc.go.jp/en/legislation_gls/imonopoly_guidelines_files/191217GL.pdf. But new guidelines issued in March 2023 seem to indicate some limited exceptions, particularly relating to environmental benefits, as will be discussed in Section 4

[23] Article 55,
https ://www.cofece.mx/wp-content/uploads/2018/03/Federal_Economic_Competition_Law.pdf.

[24] https://www.accc.gov.au/about-us/media/media-updates/accc-authorises-renewable-energy-buying-groups-in-victoria-and-western-australia

[25] The UK is one of the most prominent jurisdictions espousing this view, the latest version of its Merger Guidelines relegating market definition almost to an afterthought. However, as noted above, the same guidelines clear that the CMA can consider customer benefits in any market in the UK, so the effects of any fuzzy market boundaries it might choose are not so important – in principle affecting only a claim for 'rivalry enhancing' efficiencies, which must be within the same 'market'.

[26] Draft revised Notice on Market Definition, 2022, available at https://competition-policy.ec.europa.eu/public-consultations/2022-market-definition-notice_en

[27] Werden (2023[37]), objecting to the removal of any consideration of OOM efficiencies in the 2023 draft MGs puts it pithily "A trial judge who believes that the efficiencies should be given weight will be able make

that happen. The court could define a relevant market broad enough to assure that the efficiencies are in the relevant market. The quality of the competitive analysis would suffer as a consequence."

[28] Hovenkamp (2019[41]) notes that the consumer welfare standard in the US covers upstream harmed parties, even if the word 'consumer' is not ideal. "*What we really want is a name for some class of actors who is injured by either the higher buying price or the lower selling price that attends a monopolistic output reduction*."

[29] (OECD, 2018[6]).

[30] The author has worked for Spotify, Match.com, Epic Games and others on app store cases.

[31] The author was instructed as an expert witness by lawyers acting for UK retailers, in follow-on litigation against Mastercard's interchange fees, in front of the UK Competition Appeal Tribunal. The last claimants in this action (Asda and Morrisons) settled with Mastercard just before trial, in January 2023.

[32] MasterCard Inc v European Commission (Case C-382/12 P) (2014) 5 CMLR 23.

[33] 138 S. Ct. 2274 (2018)

[34] An alternative interpretation is that in each case authorities defined the market, in effect, to suit their preferred approach to analysing the effects of the conduct.

[35] As quoted by the UK Supreme Court judgment in Sainsbury's Supermarkets Ltd and Others v MasterCard Incorporated and Others (2020) UKSC. https://www.supremecourt.uk/cases/docs/uksc-2018-0154-judgment.pdf

[36] UK Supreme Court judgment in Sainsbury's Supermarkets Ltd and Others v MasterCard Incorporated and Others (2020) UKSC.

[37] C-382/12 P - MasterCard and Others v Commission.

[38] Amex, quoted and discussed in Alexander et al (2022).

[39] The dissent also considers that the majority opinion would be wrong even were the two sides in the same market, because Amex increased merchant fees and did not fully compensate for this with lower payments to cardholders.

[40] Although see Niels (2019[42]) for an opposing view.

[41] Except foreigners, in most jurisdictions, but again this is controversial for global environmental benefits, as discussed in Section 4.2.4, below.

[42] See (Crane, 2015[39]) and (Werden, 2017[11]) for more details of this criticism.

[43] See (OECD, 2023[48]).

[44] For example, (Crane, 2015[39]): "*the most convincing justification for a market-specificity rule is that balancing pro- and anticompetitive effects across market boundaries unduly increases the complexity of antitrust decision making*."

[45] Hemphill and Rose (2017[18]) argue this concern, were the US process more open to OOM claims.

[46] (Rybnicek and Wright, 2014[22]).

[47] For the EU, for example, see https://www.compasslexecon.com/wp-content/uploads/2021/04/CL_Expert-Opinion_Analysing-EC-Merger-Decisions_April-2021.pdf The author worked at Compass Lexecon until May 2023.

[48] That is, excluding consideration of jurisdictions operating a total welfare standard – which is a more fundamental difference than the OOM stance.

[49] (Baker, 2019, p. 193[10]).

[50] (Yun, 2022[23]). I have reordered the four conditions, better to suit the narrative structure of this paper.

[51] Yun describes this as "more for completeness than a presentation of a new idea" and considers it to reflect supply side interdependencies although arguably it also reflects his proposal to consider complements in demand, because products in a vertical supply chain *are* complements in demand.

[52] Alexander and Salop (2023[17]) in relation to monopsony power, especially over labour markets.

[53] This may sound negative, but this is the only relevance of OOM efficiencies to environmental or social issues. There are many ways in competition policy to promote such objectives; this paper's scope is limited to doing so by permitting more anti-competitive conduct to go ahead.

[54] "Taking into account the conditions specified in the authorisation, the ACCC is satisfied in all the circumstances that the Proposed Acquisition would result, or be likely to result, in a benefit to the public that would outweigh the detriment to the public that would result, or be likely to result, from the Proposed Acquisition." https://www.accc.gov.au/public-registers/mergers-registers/merger-authorisations-register/brookfield-lp-and-midocean-proposed-acquisition-of-origin-energy-limited Although this authorisation was within the ACCC's existing powers, it was regarded as unusual and caused comment, illustrating the conclusion that competition authorities open to OOM efficiencies claims do not, in fact, usually behave very differently in practice from those that are not.

[55] All examples as in (OECD, 2016[43]) and not updated for any subsequent developments.

[56] (OECD, 2016[43]) box 5, citing (Geradin and Girgenson, 2011[44]).

[57] A recent hearing of the OECD Competition Committee dealt with the interplay between merger control and investment reviews.

https://www.oecd.org/daf/competition/the-relationship-between-fdi-screening-and-merger-control-reviews-2022.pdf

[58] Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01) Hereafter "EU 2023 Guidelines"

[59] See, for example, (Holmes, 2020[49]) for arguments in favour and (Loozen, 2019[45]) against.

[60] ACM Sustainability Guidelines paragraph 48. https://www.acm.nl/sites/default/files/documents/second-draft-version-guidelines-on-sustainability-agreements-oppurtunities-within-competition-law.pdf

[61] https://www.bwb.gv.at/fileadmin/user_upload/AFCA_Sustainability_Guidelines_English_final.pdf

[62] https://www.epant.gr/files/2020/Staff_Discussion_paper.pdf

[63] CMA draft Sustainable Agreements guidelines para 6.4.

[64] Available in English at https://www.jftc.go.jp/en/pressreleases/yearly-2023/March/230331.html

[65] Such as Case Example 14 which concludes that an agreement to reduce greenhouse gas emissions that involves a small increase in container costs would be acceptable.

[66] Perhaps those consumers themselves value the emissions reduction highly – but if so, there is no collective action problem so no need for an agreement. They (we) can simply choose not to fly.

[67] The ACM's response to the EC consultation on its draft horizontal guidelines identified an exception: when such agreements are necessary to support legal standards that are inadequately enforced, for example in some developing countries. See https://www.acm.nl/system/files/documents/response-acm-public-consultation-horizontal-block-exemptions-and-guidelines.pdf

[68] More generally, although some economists would dismiss transfers of welfare as ethically neutral ("merely a shift of income between two classes of consumers.", as Bork put it) the same is not usually said of theft. If society believes that the coercive use of market power is wrong, then it will not be neutral when those who exercise market power gain.

[69] As the French and German governments did over the proposed merger of Siemens and Alstom, for example.

[70] As I have discussed more generally elsewhere. Davies (2019[46]) notes that proponents of pursuing broader goals in competition enforcement usually argue on the basis of the importance of those goals, and the relative unimportance of narrower competition goals, rather than showing that such an approach actually works. It may well do, but economic policy is rife with unintended consequences so this cannot be taken as given. There is very little published evidence to show – for example - that taking account of employment considerations actually reduces unemployment.

[71] Schinkel, Spiegel and Treuren, 2022[50]) (2022[50]) updates this analysis, extending it to cover investments leading to marginal cost reductions (removing the perverse finding from the earlier paper that collusive agreements on output itself could benefit consumers through higher investments in sustainability).

[72] (Schinkel and Tóth, 2020[31]).

[73] Peeperkorn is particularly concerned that if positive environmental externalities are taken into account in OOM efficiency claims then negative externalities must be considered too, so competition authorities would have to take action even when there are no competition concerns. However, this symmetry does not seem necessary: allowing OOM efficiency claims as justification only in the face of competitive harm seems consistent with how competition law is presently applied and it is hard to see why it should inevitably result in 'OOM harms' being considered. Jurisdictions that do allow OOM efficiency claims do not consider OOM harms in this way.

[74] The Tinbergen principle is named for Jan Tinbergen, the first recipient of the Nobel Memorial Prize for economics. Attempting to use interest rates to control both inflation and the exchange rate, for example, must fail for at least one. There is an analogous institutional dimension: that independent agencies should be charged with a specific objective.

[75] https://www.acm.nl/en/publications/speech-acm-what-fair-and-efficient-face-climate-change. The speech related to the first draft Guidelines, but the language to which Snoep objected remains in the final, gazetted version.

[76] As could an agreement that compensated the business travellers, as Coase (1960[51]) points out, but this polluter's veto is not the principle on which most environmental policy is based.

[77] A topic the OECD's Competition Committee has discussed without resolution, despite the vigorous advocacy of its Chair for such cartels to be stopped because of the harm they cause to low-income consumers and countries.

[78] *Response from the Netherlands Authority for Consumers & Markets (2022) to the Public consultation on the draft revised Horizontal Block Exemption Regulations and Horizontal Guidelines,* https://www.acm.nl/system/files/documents/response-acm-public-consultation-horizontal-block-exemptions-and-guidelines.pdf

[79] Available at https://www.acm.nl/sites/default/files/documents/technical-report-sustainability-and-competition_0.pdf and the HCC web site.

[80] The author once worked at a small consulting firm, which conducted an email survey of its 25 employees (all in one shared space) asking them to vote for their preferred office temperature. Several respondents voted for zero or one hundred degrees Celsius, the minimum and maximum available in the voting form, presumably to push the result down or up a bit. The exercise was abandoned and the final temperature determined undemocratically by management.

[81] As the technical report sponsored by HCC and ACM also notes, providing for example links to sources on shadow prices for CO_2.

[82] Positive discount rates exist for several reasons, including impatience but also because of the possibility that the activity in question will not exist in the future and because of economic growth. For very long-term discounting, the appropriate rate may be very low, indeed arguably only the expectation of growth justifies treating future generations' welfare as any less important than our own (because they will be richer). The climate change literature, summarised by the IPCC for example at https://archive.ipcc.ch/ipccreports/tar/wg3/index.php?idp=281 or (Stern, 2006[47]) generally indicates discount rates far below market rates but does not go as far as the HCC staff paper in regarding any positive rate as inequitable.

[83] Tatos and Singer (2022[53]) propose something similar, in an article arguing that only efficiencies that compensate harmed consumers should be taken into account, regardless of market definition (especially for interchange fees and other multi-sided markets).

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