Economist’s Note

Umbrella effects and the ubiquity of damage resulting from competition law violations

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I. Introduction

The compensation of victims of competition law violations is often considered an important private enforcement complement to the public enforcement of competition law.¹ In the last few years, several theoretical and applied studies investigating the fundamental economic principles and empirical-econometric methods to determine damage have been presented with the aim of guiding the courts on how to quantify damage and what amount of damages to ultimately award. This debate has led to the European Commission’s proposed Directive, currently debated by the European Parliament. It aims to facilitate damages claims through setting out how damage claims should be treated by National Courts in a common European framework.²

This paper focuses on the question of when and under what circumstances victims of competition law violations should be compensated. Section II starts by recapitulating the economic definition of damage and the multitude of victims typically affected as a result of competition law violations. This is in stark contrast to the typical focus of damages claims on direct and indirect purchasers within a vertical chain. Section III presents umbrella effects and the effects of a cartel on producers of complementary products as examples. The economic harm in both examples may be substantial and easily quantifiable despite the fact that the harm does not arise within a vertical chain. Section IV discusses causality and foreseeability that have often been proposed as justifications for limiting damages claims to the vertical chain. It is suggested that a narrow interpretation of these principles threatens the very policy goal of full compensation for any individual harmed. While the goal of regulating claims is explicitly acknowledged, a wider interpretation of these general tort principles would allow claims to be regulated by the merits of the evidence presented. Section V concludes arguing that this would render private enforcement in line with the more economic approach followed in the public enforcement of competition law.

Key Points

- Competition law violations typically result in damage outside the vertical chain often considered the only relevant focus of analysis.
- A legal reduction of damages claims to the vertical chain is in part due to a narrow interpretation of the general tort principles of causality and foreseeability.
- A wider interpretation of these general tort principles is proposed that would be in line with the policy goal of full compensation for any individual harmed.
- It would allow claims to be regulated by the merits of the economic evidence presented, thereby rendering private enforcement in line with the more economic approach followed in the public enforcement of competition law.

¹ A comprehensive legal overview can be found in David Ashton and David Henry, *Competition Damages Actions in the EU: Law and Practice*, with an Economics Contribution by Frank Maier-Rigaud and Ulrich Schwalbe (Edward Elgar, Cheltenham 2013). The relevant Commission documents ranging from the Green to the White paper can all be found on the Commission webpage: [http://ec.europa.eu/competition/antitrust/actionsdamages/documents.html](http://ec.europa.eu/competition/antitrust/actionsdamages/documents.html).

II. Damage, damages and the vertical chain

Damage as a result of a competition law violation is the difference between the profits obtained under the factual situation with the infringement and the profits in the counterfactual situation that would have obtained in the absence of the competition law violation. In the simplest case, a direct purchaser of a cartel who in turn sells to final consumers is damaged by both the difference in profits for the units he continues to sell under the cartel and the loss of profits for the units he or she no longer sells due to the increase in price induced by the cartel. The damage is thus nothing else than lost profits.

In the discussion of actual harm suffered and damages claims, only simple vertical structures are typically considered. Often the assumption is that the damage is caused by a cartel and exclusively harms direct and indirect purchasers. Even the draft Directive of the Commission barely deviates from this notion when discussing effects that may occur upstream of the cartel at the level of direct and indirect input suppliers. In the USA, the legal framework constrains damages actions to direct and indirect purchasers depending on whether one considers the federal or state level but what are the reasons in the EU for such a narrow focus in the context of a policy debate? Was the EU debate misled by US precedent and a host of legal and economic publications limited to questions of pass-on and direct and indirect purchaser standing? It is one thing to write about how damage should be quantified de lege lata, where, obviously, the given legal constraints have to be taken into account in order to be successful in court. It is an entirely different exercise to think about how this should be done de lege ferenda. In the latter case, an economic input is useful, in particular if a too narrow approach threatens the underlying policy goal that both the European Courts and the European Commission have clearly indicated to be full compensation for any victim of a competition law infringement. If that is the policy goal, one cannot turn a blind eye to the ubiquity of economic harm resulting from competition law violations.

Damage or economic harm is typically different from the damages that are awarded as a result of damages claims. There are essentially two reasons for this. The first is related to the difficulty of establishing the exact amount of harm suffered. This is due to the difficulty of establishing an accurate counterfactual and also to often limited data availability rendering the quantification of lost profit difficult. The second reason relates to the legal framework that ultimately defines what type of damage (or harm) may result in damages being paid and what type of evidence needs to be produced to demonstrate harm. If the policy goal is the compensation of victims, it follows that damages should equal or at least approximate the actual harm done when the harm can be demonstrated in line with some required standard of proof. This implies that one needs to be interested in all effects of competition law violations and cannot assume a priori that relevant harm only occurs on certain levels of a vertical chain.

This restriction to the vertical chain is particularly problematic when considering one of the ultimate aims of competition law, that is, the (consumer) welfare resulting from an efficient and undistorted allocation of resources. The very basis for the efficiency of a decentralized market economy is the fact that price signals contain all the relevant information needed for the optimal allocation of resources. If the harvest is partly destroyed by a storm, the ensuing increase in the crop price ensures optimal substitution patterns throughout the economy. Supply is redirected, for example, from other regions and demand is diverted to the next best alternative. As a result of this diversion of demand, the price of that next best alternative goes up, allowing for additional diversion to other substitutes, etc. This is the essence of a decentralized market economy. Whether the shortage is due to natural forces or artificially created by a cartel does not matter for the way the economic system deals with the shortage. Pretending, therefore, that

3 In the case of final consumers, this difference is measured in utility.
4 The former could be described as the total overcharge minus the pass-on also known as damnum emergens, whereas the latter is the quantity effect also known as lucrum cessans. Both together are the lost profits or the difference in profits between the factual and the counterfactual scenario. On this and the importance of quantity effects, see Frank Maier-Rigaud, ‘Toward a European Directive on Damages Actions’ (2014) Journal of Competition Law and Economics, forthcoming.
6 Note, however, that in the USA, umbrella claims have been brought, albeit with mixed success.
7 If in contrast deterrence is the primary goal of private enforcement, there is no reason why harm should equal or even approximate damages.
8 The absurdity of this assumption should already be clear when moving from cartel to abuse of dominance cases. On this, see Frank Maier-Rigaud and Ulrich Schwalbe, ‘Quantification of Antitrust Damages’, in D Ashton and D Henry (eds), Competition Damages Actions in the EU: Law and Practice (Edward Elgar, Cheltenham 2013) and Maier-Rigaud and Schwalbe, ‘Private Enforcement Under EU Law: Abuse of Dominance and the Quantification of Lucrum Cessans’ (2013) CPI Antitrust Chronicle 11:2, 1–11.
9 This, of course, assumes the absence of externalities.
actual harm resulting from competition law violations can neatly be analysed in a simple vertical scenario is incorrect. One may ultimately want to pretend that this is the case in order to simplify things, as is, for example, the case in the USA, but even then, one typically would not want to do so for the wrong reasons or without knowing the consequences. As a result, it is essential to conceptually understand the ubiquity of damage caused and how this ubiquity can be efficiently dealt with from a legal and procedural point of view in light of a given ultimate policy aim.

As the stated policy aim is full compensation of any victim of a competition law violation, it is useful to discuss instances where substantial harm may arise outside the vertical chain and where such harm may be relatively easy to demonstrate. Arguments against a general rule are weak when the rule only fails to accurately capture cases of limited relevance. If the lack of precision concerns only instances of relatively unimportant magnitude that in addition would be almost insurmountably difficult to prove in court, there is not much point in rendering the rule more comprehensive, particularly if it becomes more complex and more difficult to administer.  

### III. Umbrella effects and effects on producers of complementary products

Consider the topical issue of umbrella effects. From an economic theory point of view, it is obvious that a successful partial cartel harms even those customers that do not purchase from the cartel but from non-cartelized firms in the same relevant market. The reason for this is that these firms will face an increase in demand due to the substitution away from the cartel. Facing an increase in demand, a typical profit maximizing response of the non-cartelized firms, whether they are aware of the cartel or not, is to increase the price albeit by a lower magnitude than the price increase of the cartel. That these effects are theoretically unavoidable and therefore to be expected does not imply that they may empirically play a major or even relevant role. An umbrella customer, facing a given set of evidentiary requirements in proving the harm done to him, is facing exactly the same hurdles as a direct purchaser from the cartel when attempting to quantify the damage. If the umbrella firm operates in the same relevant market, the damage suffered is also likely to be of a similar magnitude as the damage suffered by a direct purchaser from the cartel. The reason is that both the direct purchaser from the cartel and the purchaser from the umbrella firm will typically have the possibility to substitute. A purchaser who buys from the cartel must be better off purchasing there than to switch to the umbrella firm and the same applies to the umbrella purchaser. Demand diversion is a matter of substitutability so that more demand is diverted, the closer substitutes the products of the non-cartelized firms are. The closer the substitutions, the more important the cartel outsiders become for cartel stability. While the approach to quantifying damage is the same for both firms, so that no distinction between ease of demonstration can be made, a similar magnitude in terms of damages occurred is not unlikely. Indeed, a lot will depend on quantities purchased so that it is easily imaginable that the magnitude of the harm suffered by an umbrella purchaser is a multitude of the harm suffered by a direct purchaser.

Another, conceptually even simpler, example is the case of complements. Consider a situation where firm A sells complements to the cartelized product and where consumers purchase the two goods in fixed proportions, for example there are two complements for each cartel

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10 Note that these are of course empirical questions. The fact that two types of damage outside the usual vertical chain are isolated here does neither imply that those are the only ones, nor that others are less relevant in terms of magnitude or necessarily more difficult to prove. The notion that damage declines in magnitude the further it is situated from the actual cause, ie the competition law violation, can be revealed as wrong in very simple scenarios. See for example Maier-Rigaud and Schwabte ‘Quantification of Antitrust Damages’ (n 8) 221ff or Roman Inderst, Frank Maier-Rigaud, and Ulrich Schwalte ‘Quantifizierung von Schäden durch Wettbewerbsverstöße’, in A Fuchs and A Weitbrecht (eds), Handbuch der Privaten Kartellrechtsdurchsetzung (2014), available at http://ssrn.com/abstract=2231962.

11 These effects actually do not rely on firms being in the same relevant market. It can easily be envisioned that firms that are not producing relevant substitutes at competitive prices, do so under cartel prices. To the extent that demand is diverted to these firms, price increases by these firms are to be expected. For details on this and a comprehensive theoretical treatment of umbrella effects see Roman Inderst, Frank Maier-Rigaud, and Ulrich Schwalte, ‘Umbrella Effects’ (2014) Journal of Competition Law and Economics, forthcoming.

12 It has been argued that this reaction by umbrella firms is qualitatively different from the reaction of direct purchasers. The argument presented, often in an effort to justify a break in the causal chain allowing the subsequent barring of claims, is that a direct purchaser increases her own prices in an effort to attenuate the harm done by the cartel, whereas an umbrella firm increases price in an effort to maximize profits. This is an unfortunate confusion. Both the direct purchaser and the umbrella firm will react in a profit maximizing fashion and both will thereby minimize the harm done by the cartel. As explained in the example of the storm and the harvest, it is not possible to differentiate between ‘good’ and ‘bad’ increases in cost or in demand. The umbrella firm faces an increase in demand, which is a natural reaction to the scarcity imposed by the cartel. An efficient allocation of resources will typically require an increase in price as a result of an increase in demand. There is therefore no qualitative distinction between the two scenarios let alone a reason to argue a break in the causal chain.

13 Whether umbrella effects matter in practice is an empirical question. There may be factors that mitigate or even completely attenuate these effects, so that one would be wrong to expect large and important umbrella effects in every particular instance.
product bought. When making these purchases, a consumer will therefore take into account the price of the bundle if each product has no value unless purchased as part of the combination. Under these conditions, the cartel harms the producer of the complements as A’s sales decrease. In reaction to this, A will typically adjust its prices downwards thereby incurring harm both by selling less and selling this reduced quantity at a lower price.\textsuperscript{14} While this benefits the purchasers—who are therefore less harmed from the cartel than they would otherwise be—A may face a damage of substantial magnitude. Proving that harm should be even easier than demonstrating the harm of a direct purchaser in a classic vertical scenario, as A is well placed to demonstrate a credible counterfactual. If, in addition, products are consumed in fixed proportion, information on quantities gained in the context of harm suffered by the direct purchaser is of direct relevance for the quantification of damage of A and \textit{vice versa}.

These two simple scenarios should demonstrate that substantial damage may occur outside the vertical chain and that this damage may at least in certain circumstances be easily quantifiable. What would, therefore, be reasons not to look at such instances? Why would one want to pretend such damage does not exist, is difficult to prove, or is of low magnitude?

In other words, why would one want abstract notions of ‘causality’ and ‘foreseeability’ to bar economically legitimate and relevant claims \textit{a priori}? Why would one not want to regulate claims based on the magnitude of the damage suffered and the merits of the evidence presented?

\textbf{IV. Causality and foreseeability}

Consider two civil law examples. In the first one, person A injures B lightly but sufficiently for B to have to be brought to the hospital. Assume that the ambulance that carries B is involved in a traffic accident resulting in the death of B. Clearly A caused B’s death in the sense that absent the light injury A inflicted on B, B would not have been in the ambulance and would therefore not have died in the accident. Who would disagree that it would, nevertheless, be inappropriate to blame A with the death as this accident could not have reasonably been foreseen? In the second example A operates an excavating machine and inadvertently cuts underground electricity cables resulting in a one-day blackout in the housing complex in the vicinity of the earthworks. Clearly A caused damage to the lamp store that could no longer showcase and demonstrate its lamps on the ground floor but also to the inhabitants on the higher floors who were left in the dark, trapped in the elevator, could not cook, or whose groceries perished in their fridges. Who would disagree that it may not be the best use of a court’s time to consider damage resulting from a few perished groceries for possibly a large set of inhabitants in detail?

General tort principles have evolved to deal with these types of cases and have probably rather successfully dealt with them by striking an efficient and practical balance between scientific causality and notions of fairness, procedural efficiency and practicality. Damage resulting from competition law violations is different. It involves claimants with professional legal and economic advisors who can gauge the chances of successful damages claims just as they can gauge the costs of bringing such claims. As a result, the risk of courts being overrun by insignificant claims of dubious merit seems remote and could easily be dealt with by tightening evidentiary standards. The question, therefore, is whether concepts such as the tort principles under discussion, which evolved in a different context, can be transposed one to one to a competition law context. Stated otherwise, does a restrictive interpretation of general tort principles make sense in the area of competition law or is there a need for a more refined claims regulator? Would empirical proof in line with evidentiary standards not be a superior tool? If so, would it not make more sense to push back on causality and foreseeability tests and consider them automatically met when clear evidence of harm due to a competition law violation has been presented? This is in part an empirical and in part a policy question that unfortunately has not received sufficient attention in the context of the debate on the private enforcement of competition rules.\textsuperscript{15}

It is a legitimate aim of any policy to strive for general rules that are practical and procedurally efficient even if they come at the expense of a lower degree of accuracy in any particular case. The quality of a rule does not stand and fall with the accuracy of fit in any particular case but how it fares across a large set of cases.\textsuperscript{16} This is in contrast to what has been at least implicitly argued by many economists in the context of the more economic approach to competition law. It is perfectly legitimate to

\textsuperscript{14} Again, note that this is an optimal reaction for A. The reduction in price mitigates the harm form the cartel, it does not exacerbate it.

\textsuperscript{15} See Maier-Rigaud (n 4) for a critical discussion of causality in the context of the draft Directive.

\textsuperscript{16} The real challenge under a more economic approach lies in devising economically informed rules. The highly polarized debate, however, suggested that the choice was between economically uninformed per se rules on the one hand and an economics-based case-by-case analysis on the other.
draw a line in the name of procedural efficiency, transparency or legal predictability and this implies tough trade-offs at the margin. It is actually a defining characteristic of an economically sound ‘more economic approach’ to attempt to devise broad rules that are economically informed and minimize type I and type II errors. The same also applies in case of damages actions.

Nobody wants to see courts overrun with de-meritorious damages claims but when confronted with a clear policy goal of full compensation for any victim of a competition law infringement, it may be contradictory to bar them from compensation \textit{a priori} particularly if harm can be demonstrated in accordance with evidentiary principles.

In her recent opinion in Case C-557/12 KONE AG and Others, AG Kokott has dealt convincingly with the notion of ‘sufficiently direct causal nexus’ and ‘foreseeability’.\textsuperscript{17} The solution she proposed in the context of umbrella effects

does not mean that cartel members will automatically and in every individual case be required to provide compensation to customers of undertakings not party to a cartel, but it does not rule out such an obligation to provide compensation from the outset either. Rather, it will always be necessary to carry out a comprehensive assessment of all the relevant circumstances in order to determine whether the cartel in the case in question has given rise to umbrella pricing.\textsuperscript{18}

More importantly, she argues in favour of ‘[s]hifting the umbrella pricing issue from the level of pure theory to that of the production of evidence’\textsuperscript{19}. Some may find the statement trivial that decisions of a magnitude as is likely to be the case in damages actions are not left to arbitrary demarcations based on notions of causality and foreseeability unrelated to the magnitude of the damage and the quality of the evidence advanced. It is important, however, to recognize the importance of procedural efficiency and practicability that stand behind these principles.

Regulating claims via criteria that are undesirable \textit{ex ante} may be justifiable if alternatives prove impractical.

What is not justifiable is to assume such impracticality \textit{a priori} without proper empirical investigation.

V. Conclusion

The ubiquity of damage resulting from competition law violations does not \textit{a priori} imply that all damage should be recoverable in the context of damages claims. If, as has been attempted here, situations can be shown to exist where substantial and easily proven damage is excluded in the name of procedural efficiency and practicability, evidence of the risks of allowing such claims must be produced. Even if a narrow interpretation of general tort principles is appropriate \textit{de lege lata} it cannot implicitly be assumed to be the right policy approach \textit{de lege ferenda}, particularly if the whole point of the private enforcement policy initiative is to find the legal framework that would allow victims of competition law infringements to be compensated.

There is no doubt that pushing back on causality and foreseeability raises difficult issues regarding the burden of proof and the role of (rebuttable) presumptions, but any claims regulator not tied back to actual harm suffered and ease of demonstration of that harm requires justification. No empirical or theoretical justifications have been provided so far. In that sense, AG Kokott did what the Commission did not dare to do, namely bring these important questions to the forefront. Her opinion does much more than eliminate a categorical ‘no’ to umbrella effects claims; she ushers in a more economic, more scientific approach by emphasizing the role empirical evidence should play. This bears the hope that the policy goal of full compensation for any individual harmed is not unnecessarily restricted by arguably defunct dogmatic principles. A more economic approach, also in private enforcement, may be possible.

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\textsuperscript{17} In an extremely lucid paragraph in the section on foreseeability AG Kokott notes that cartelists in a partial cartel rely on these umbrella effects when determining the cartel price, so that there can be no doubt that the foreseeability criteria is met. See para. 51 in Opinion of Advocate General Kokott, delivered on 30 Jan. 2014 in Case C-557/12 KONE AG and Others (Request for a preliminary ruling from the Oberster Gerichtshof (Austria)).

\textsuperscript{18} See para. 84 in Opinion of Advocate General Kokott, delivered on 30 Jan. 2014 in Case C-557/12 KONE AG and Others (Request for a preliminary ruling from the Oberster Gerichtshof (Austria)).

\textsuperscript{19} See para. 85 in Opinion of Advocate General Kokott, delivered on 30 Jan. 2014 in Case C-557/12 KONE AG and Others (Request for a preliminary ruling from the Oberster Gerichtshof (Austria)).