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Article

The deadweight loss in competition litigation seen from compensation and deterrence perspective: lessons from a Chilean price-fixing cartel

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ABSTRACT

Competition law enforcement is continuously being fine-tuned to serve two important goals: compensation and deterrence. This is true for the European Union, where the discussions about this balancing exercise are far from final and also for other parts of the world. This article focuses on a currently neglected damage component in litigation and its potential in this regard: the deadweight loss. It emerges for those consumers at the end of the supply chain that would have bought the product at the market price but for the cartel but do not acquire it at the cartelized price (anymore). Importantly, this article will outline how it can simultaneously serve both, the compensation and deterrence goals. It is a challenging damage component. However, a Chilean court in 2019 awarded final consumers compensation for the deadweight loss that others suffered aside from the price mark-up that some paid. The article exemplifies what aspects of Chilean law enabled this judgment and briefly assesses the latest European developments in collective redress in this regard.

KEYWORDS: Damages, Deterrence, Deadweight loss
JEL CLASSIFICATIONS: K21, L41

1. INTRODUCTION

Competition law enforcement is continuously being fine-tuned to serve two important goals: compensation and deterrence.[1] This is true for the European Union (EU),[2] where the

[1] This article is in part based on Weber, 'Deadweight Loss and Collective Redress in Competition Law' in Kramer *et al.* (eds), *Delivering Justice – A Holistic and Multidisciplinary Approach* (Hart Publishing 2022) 139–150. Aldo Gonzalez is the author of the consumer sides' expert report that lies at the core of the Chilean procedure.

[2] Their merit and interrelation are discussed on a more general level—see eg, Opinion of Advocate General Wahl of 6 February 2019 in C-724/17, ECLI:EU:C:2019:100—Skanska, para 27. However, for this article, we shall more narrowly discuss the value of the deadweight loss in the light of these two established perspectives.

discussions about this balancing exercise are far from final and also other parts of the world. One crucial but currently neglected damage component in this endeavour is deadweight loss. For the sake of simplicity, let us focus on price-fixing cartels in this article. In our general framework, a cartel sells a product directly to the final consumers but there are intermediary direct and indirect buyers. Looking down along the supply chain, there are four important damage components. The attention that they have received in legal writings and legal practice decreases with their order of appearance: the overcharge,[3] pass-on,[4] the volume effect,[5] and the deadweight loss.[6] Apart from whatever percentage of the original price mark-up put by the cartel ultimately ends up with the final consumers (also called the 'passed-on overcharge'), economists are very concerned about a cartel's second effect, namely the deadweight loss. The former is a distributional consequence in the sense that what consumers pay more goes to the cartel. The latter constitutes an allocative inefficiency. And should not legal scholars also be concerned about the deadweight loss?[7] A price-fixing cartel leads to distributional and allocative effects, or a price and a quantity effect, if you prefer.[8] In other words, a cartel sells fewer units at higher prices than would be available in a competitive market. Final consumers, therefore, on the one hand, pay too much for the products they (still) buy. On the other hand, a certain percentage of final consumers who would have bought the product at the price, if it were not for the cartel, is no longer able to acquire it at the cartelized price. The deadweight loss emerges. In order to assess the importance of the deadweight loss, we need to put things into perspective. The classical goals of competition law enforcement whose value we will discuss in the following are that of compensation and of deterrence. These are the two perspectives which are also crucial in European competition law and other competition laws around the world. Importantly, this paper will outline how compensation for the DWL can simultaneously serve both, the compensation and deterrence goals. However, handling it effectively in cartel litigation is challenging. Therefore, references are made throughout this article to a Chilean case decided in 2019. In this judgment, remarkably, final consumers were compensated, both, for the price mark-up they had to pay and the deadweight loss they suffered. This case may serve simultaneously as proof of the feasibility of compensating the deadweight loss apart from the overcharge and inspiration to

[3] There are many studies, eg Oxera, 'Quantifying Antitrust Damages—Towards Non-binding Guidance for Courts' (2009) or J Connor and R Lande 'The Size of Cartel Overcharges: Implications for U.S. and EU Fining Policies' (2006) 51 Antitrust Bull 983. From the private enforcement side, see R Van den Bergh 'Private Enforcement of European Competition Law and the Persisting Collective Action Problem' (2013) 20 Maastricht J Eur Comp Law 12; F Weber 'A Chain Reaction—or the Necessity of Collective Redress Mechanisms for Consumers in Competition Cases' (2018) 25 Maastricht J Eur Comp Law 208; see for an estimation: U Laitenberger and F Smuda, 'Estimating Consumer Damages in Cartel Cases' (2015) 11 J Compet Law Econ 955; G Gaudin and F Weber 'Antitrust Damages, Consumer Harm, and Consumer Collective Redress' (2021) 12 J Eur Compet Law Pract 370.

[4] There are less studies available than for the overcharge but note RBB Economics, Cuatrecasas and G Pereira, *Study on the Passing-on of Overcharges* (Publications Office of the EU 2016), European Commission, Final Report and RBB Economics, 'Cost Pass-through: Theory, Measurement, and Potential Policy Implications' (2014), Report prepared for the Office of Fair Trading. Judges are hesitant to grant the passing-on defence and, hence, calculate this damage component, see F Weber, (2020) 16 'Tackling Pass-on in Cartel Cases: A Comparative Analysis of the Interplay between Damages Law and Economic Insights' Eur Compet J 570.

[5] No individual study is devoted just to this component at the EU level, but see Communication from the Commission, Guidelines for national courts on how to estimate the share of overcharge, which was passed on to the indirect purchaser, (2019) or RBB Economics, Cuatrecasas and Pereira ibid, that do devote specific attention to its emergence and calculation. Judges do not get there in practice, see F Weber, 'The Volume Effect in Cartel Cases—A Special Challenge for Damage Quantification?', (2021) 9 J Antitrust Enforc 436.

[6] It is mentioned as the cause of competition problems, but, however, it does not figure explicitly in recent legislation or accompanying soft law documents: see RBB Economics, Cuatrecasas and Pereira (n 3) 13f, 261.

[7] In D Crane, 'Optimizing Private Antitrust Enforcement' (2010) 63 Vand L Rev 673 and D Crane, *The Institutional Structure of Antitrust Enforcement* (OUP 2011), chs 3 and 9 the author attests that private enforcement tends to do a poor job at compensating individuals. For the deadweight loss he, in essence, argues that private parties typically do not sue for this; however, that treble damages serve to recover also the DWL, even if this seems ill-designed (see p. 165 in his book). We seek to show that with a better consideration and better use of economic insights while at the same time interpreting the full compensation principle slightly less strictly, private competition law enforcement may actually present a viable option to handle the deadweight loss.

[8] M Motta, *Competition Policy—Theory and Practice* (CUP 2004) 40.

other jurisdictions, like the European one. We shall briefly stress the potential of seeing a similar case in European cartel litigation under the current enforcement landscape. As a limitation, the article focuses on the value of private enforcement only to serve compensation and deterrence goals by way of successfully handling the deadweight loss—only minor references will be made to the public enforcement dimension and its interplay with private enforcement.

2. PUTTING THE DEADWEIGHT LOSS IN PERSPECTIVE

An inspiring example: Chile

In 2019, a Chilean court for the first time awarded compensation for the deadweight loss.[9] This is to our knowledge a unique event in current competition law enforcement. The case concerned collusion among pharmaceutical retail companies. The pharmacy chains Cruz Verde, Salcobrand and FASA had colluded between December 2007 and March 2008 to artificially increase the prices of at least 206 drugs, most of them available on prescription only. Prior to forming a cartel, the pharmacy companies had been in a heavy price war. Thus, firms coordinated prices explicitly to escape from the onerous price war and significantly increased their margins afterwards.

The competition law infringement was found by the specialised court *Tribunal de Defensa de la Libre Competencia* (TDLC) in 2012 and the legal maximum in fines was consequently imposed.[10] This investigation effectively brought the cartel to an end. This decision led to two judicial procedures: on the one hand, the Chilean Supreme Court upheld the TDLC's decision[11] and on the other hand follow-on litigation for damages emerged in the civil court.[12] In the latter, the *10° Juzgado Civil de Santiago* ultimately awarded two damage components, namely the (passed-on) overcharge and the deadweight loss.[13] To that end, the court identified two groups of consumers: Group 1 consisted of the consumers who had paid an increased price between 1 January 2007 and 31 March 2008. Group 2 consisted of the consumers who had abstained from buying the medication due to the price increase. The calculation resulted in the compensatory amount of $1.736.961.314 (EUR 1.895.234)[14] for group 1. For group 2, the deadweight loss amounted to $284.916.956 (EUR 311.370). After various appeals filled by one of the participating pharmacies—FASA—the Court of Appeals of Santiago (2023) along with rejecting them, increased the compensation applied to FASA, by reasons we will explain later, by more than doubling what was initially established by the civil court.

Economic underpinning of the final consumers' damage

Along a supply chain cartel, damage caused by a price-fixing cartel evolves in the following way:[15] The cartel fixes an elevated 'cartelized' price which is paid by the direct cartel purchasers. This results in a damage component called 'overcharge'. Faced with such an overcharge, direct purchasers typically pass-on some, or—in case the market conditions allow—all of the overcharge amounts to the next level in the supply chain.[16] The increase of their own prices leads to a drop in sales for the direct purchaser which normally means lost profits.[17] This damage

[9] See C-1940-2013, judgment of 17 December 2019, 10° Juzgado Civil de Santiago.
[10] See TDLC, Sentencia No 119/2012 of 31 January 2012.
[11] Supreme Court, Rol No 2578-2012, approved TDLS's decision on 7 September 2012.
[12] C-1940-2013 (n 8).
[13] See C-1940-2013 (n 8), Cuadragésimo noveno and following.
[14] See for conversion ratio <https://www.xe.com/currencyconverter/convert/?Amount=27&From=CLP&To=EUR> accessed 17 September 2023.
[15] RBB Economics, Cuatrecasas and Pereira (n 3) 13.
[16] R Harris and L Sullivan, 'Passing on the Monopoly Overcharge: A Comprehensive Policy Analysis' (1979) 269 U Pa L Rev 276: 'passing on of overcharges is not the exception: it is the rule. [...]'.
[17] Only exceptionally would this not be the case if the purchaser did not have a profit margin in the but-for scenario and, hence, could not have lost any of that margin or if there was no drop in demand whatsoever after pass-on (perfect price elasticity of demand).

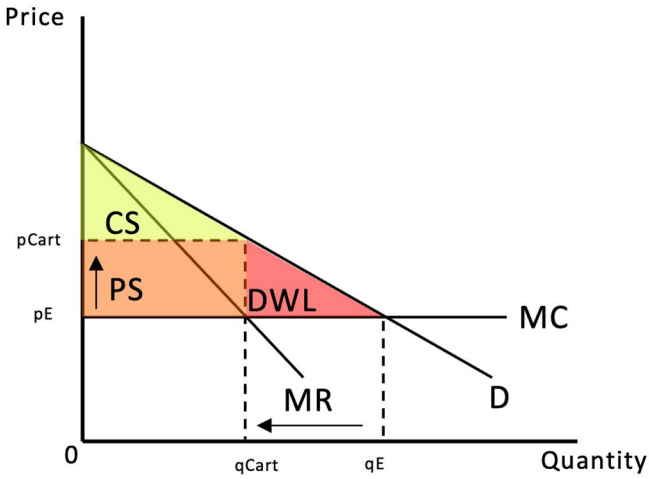

Figure 1. Welfare impact of collusion. Own illustration is based on Motta (n 7).

component is called the 'volume effect'. Closely linked with this sales reduction is our damage component of interest: the deadweight loss. No matter how long the supply chain is, the sales that happen along it are ultimately driven by the final consumer level. If they consume less, the number of sales made along the chain drops. With this in mind, and since the core interest of this article is not about the complexities of pass-on and the volume effect for the remainder, the analysis will be simplified in the sense that the cartel should be assumed to directly offer its products to the final consumers.[18]

The welfare impact of collusion can be illustrated in Figure 1.

In this figure, the outcome of a cartel's pricing behaviour is contrasted with the result obtained in a competitive market where an equilibrium price pE and an equilibrium quantity qE arise.[19] When optimizing the price, cartels just as monopolists sell a lower quantity at a higher price; therefore, pE does not emerge where demand D and the marginal cost curve MC intersect. Instead, a cartelized price (pCart) comes into existence which can be located where the cartel's marginal cost MC and the marginal revenue curve MR intersect. This also implies a lower quantity qCart. This leads to two effects: A share of what would have been consumer surplus (CS) at an equilibrium price level is turned into producer surplus (PS). Furthermore, aside from this redistributive effect, the deadweight loss (DWL) emerges, which is an allocative effect: sales are lost as compared to the situation in a competitive market. In essence, in a competitive market, the entire triangle—including the PS plus DWL—would have been CS (yellow). In a competitive market, CS is at its highest level. As background information to the damaged components, it is helpful to reconsider that the D displays the fixed reservation prices. These are the prices that the consumers are willing to pay for a certain product, ie their maximum prices.[20] Those consumers whose reservation price equals the price at which a product is available in a given market are in principle

[18] As stated, no matter how many layers a supply chain has, the final consumers are always the ultimate drivers of the sales along the chain. Since our component of interest rests with the final consumers, we shall, therefore, only look at a two-layer situation for the reminder.

[19] In reality, markets in the absence of a cartel do not show all the characteristics of perfect competition. However, this graph serves mainly to illustrate the emerging damage components. The horizontal supply curve implies an extreme market situation in which all producers are homogeneous and have constant marginal costs. Consequently, this means that no producer surplus is obtained, it is purely consumer surplus.

[20] Obviously, there are a number of challenges regarding the quantification and the comparability of this reservation price, but they lie beyond the scope of this contribution.

indifferent between buying and not buying. All the consumers whose reservation price is below that price do not buy. And, finally, all those consumers whose reservation price is above the price that emerges in a market are gaining in utility. They would have paid even more than the price at hand. They obtain CS, which is, therefore, the difference between the consumer's reservation price for a product and the actual price they paid. If a cartel is active in a market, prices go up. Therefore, more consumers will end up with a reservation price below the price for which the product is available in the market in which the cartel is active. They do by definition not buy.

Final consumers are harmed in two ways by an infringement of competition law. First, purchases that they made during the infringement period (eg, while a cartel was ongoing) were made at inflated prices. This is straightforward. This shift from CS to PS is the 'cartel overcharge'.[21] Secondly, the DWL captures the benefits (the utility) that buyers would have derived from all the purchases which they did not undertake because of the infringement. This is also called the 'lost consumption effect'.[22] It captures the harm of those buyers who refrained from purchasing or reduced their purchase volume, during the infringement period precisely due to the inflated prices, but who would have bought (more) without the infringement. Hence, as a group, consumers will typically reduce the quantity they purchase in light of a price increase.[23] Some consumers would have bought the product or service in question at the non-cartelized price; but, however, not at the cartelized price. This also negatively affects the size of the CS. The DWL is necessarily not negligible in amount.[24]

Economists, knowing the parameters of the demand function,[25] are able to determine how large the deadweight loss is for a group of consumers.[26] Using the notation of Figure 1, the cartel overcharge is defined as:

$$D_P = q_{Cart}\Delta P = q_{Cart}(p_{cart} - p_E)$$

The deadweight loss, employing a linear approximation of the demand function can be expressed as

$$D_Q = \varepsilon q_{cart}\frac{\Delta P^2}{2P_{cart}}$$

where ε is the price elasticity of the demand. The above equation is equivalent to:

$$D_Q = \left[\frac{\varepsilon}{2}\frac{\Delta P}{P_{cart}}\right]D_P$$

The equation expresses that the damage associated with loss of consumption—deadweight loss—is equal to the damage due to price overcharge, multiplied by a coefficient which in

[21] Whenever there are several layers of the supply chain, the more accurate term would be the 'passed-on overcharge'.

[22] RBB Economics, Cuatrecasas and Pereira (n 3) 13.

[23] This is the classical output effect that comes with a price effect which is only missing if the price elasticity of demand is completely non-elastic (and, hence, no consumer, in the light of the price increase in question, would switch to a different product and/or stop buying).

[24] M Han, M Schinkel and J Tuinstra, 'The Overcharge as a Measure for Antitrust Damages' (2008) ACLE, Working Paper No 2008-08; CR Leslie, 'Antitrust Damages and Deadweight Loss' (2006) 51 Antitrust Bull 521.

[25] It suffices to have a functional form of the demand or to know the price elasticity of the demand in the range of pre and post cartel consumption.

[26] M Havens, M Koehn and M Williams, 'Consumer Welfare Loss: The Unawarded Damages in Antitrust Suits' (1990) U Dayton L Rev 457, 463; D Hjelmfelt, and C Strother 'Antitrust Damages for Consumer Welfare Loss' (1991) 39 Clev StL Rev 505, 510; see for a calculation M Schinkel, 'Illegale winsten en efficiëntieschade als gevolg van kartelafspraken in de Nederlandse bouw: een toelichting op de Zembla-uitzending "Afrekenen met de bouw"' (ACLE, 2006).

turn increases with the size of the price overcharge and the elasticity of the demand. Intuitively, a more elastic demand means that consumption is more sensitive to price increases. As a consequence, the impact of lower purchasing will be more severe. It is true that in less elastic markets, cartels can achieve a higher price overcharge. However, given an observed cartel overcharge, the damage to the consumer is greater for more elastic demand functions.

In our case of collusion among pharmacies in Chile, the estimated deadweight loss was about 16–18% of the magnitude of the price effect. However, for more elastic demand, it may even be a larger damage component compared to the harm resulting from the cartel overcharge.[27]

From the point of view of identifying the consumers affected by the cartel, it is clearly more difficult to identify those who stopped buying or reduced their consumption than those who kept buying and paid the extra price. We will discuss in the following section the complexities of compensating consumers belonging to the group of buyers affected by the deadweight loss.

Compensation perspective

The underlying idea of full compensation that underlines many private law enforcement systems is to put individuals in the situation that they would have been in, had the infringement not occurred. The goal is to achieve a status of indifference between these two situations, not less, not more. The preceding section leads to an important conclusion from the compensation perspective: to accurately compensate final consumers, attention needs to be paid to both: the (passed on) overcharge and the DWL. It is our understanding that this is a necessary consequence of the principle of full compensation as it is also postulated in European law.[28] The EU Antitrust Damages Directive (Damages Directive),[29] which was enacted in December 2014 after almost a decade of consultations is very explicit in its reference to the principle of full compensation in its Article 3. The Damages Directive puts special emphasis on the necessity to fully compensate consumers, to neither create over- nor undercompensation.[30] Overall, it omits an explicit reference to the DWL though, unlike the overcharge, pass-on and the volume effect.[31] The 2019 Guidelines do not explain it either.[32] The explanations in the proposal for a Damages Directive mention the terms 'material' and 'immaterial' damage.[33] The deadweight loss as, in the utility consumers never enjoyed, is typically classified as 'non-material' rather than 'material' damage. Typically, normative considerations are used to limit the compensation payments for non-material harm to avoid opening the

[27] See Gaudin and Weber (n 2).

[28] See on immaterial loss: C Heinze, *Schadensersatz im Unionsprivatrecht* (Mohr Siebeck 2017) 601.

[29] Directive 2014/104/EU of the European Parliament and of the Council of 26 November 2014 on certain rules governing actions for damages under national laws for infringements of the competition law provisions of the Member States and of the European Union, OJ L 349, 5 December 2014, 1–19.

[30] Recital 3 and following and art 1(1) 1st sentence and art 3 Damages Directive; the antitrust damages regimes in the European Member States were already geared towards this goal before the implementation of the Directive, see B Rodger, M Sousa Ferro and F Marcos, 'A Panacea for Competition Law Damages Actions in the EU? A Comparative View of the Implementation of the EU Antitrust Damages Directive in Sixteen Member States' (2019) 26 Maastricht J Eur Comp Law 480, 498.

[31] However, the Directive does stipulate that anyone can claim compensation, see U Schwalbe, 'Lucrum Cessans und Schäden durch Kartelle bei Zulieferern, Herstellern von Komplementärgütern sowie weiteren Parteien' (2017) 5 NZKart 157, 163 and Heinze (n 27) 218.

[32] Communication from the Commission–Guidelines for national courts on how to estimate the share of over-charge, which was passed on to the indirect purchaser, C/2019/4899, OJ C 267, 9 August 2019; neither, as has been said, does RBB Economics, Cuatrecasas and Pereira (n 3) deal with it.

[33] Proposal for a Directive of the European Parliament and of the Council on certain rules governing actions for damages under national law for infringements of the competition law provisions of the Member States and of the European Union, COM/2013/0404 final – 2013/0185 (COD), 13.

floodgates.[34] The Damages Directive does not preclude claiming compensation for the deadweight loss. However, nor does it facilitate it by way of stipulating any provision that specifically deals with it. After all, it is also a general principle of European law that non-material damage can be claimed. Hence, any jurisdiction that is truly seeking full compensation, like the EU, needs to enable compensation for the DWL.

Economics can inform how to overcome challenges related to compensation for the DWL. First of all, there are those consumers whose purchase is maintained despite the price markup. If it is shown that they acquired the goods during the period of cartelization, they could obtain compensation. The only complexity in this case would be determining the counterfactual price, which is normally estimated in calculations presented by the parties in damages proceedings.

In compensating the DWL, there are specific challenges regarding standing and proof. After all, we are discussing a transaction that has never taken place, but that would have occurred but for the infringement. The challenges concern identifying consumers that would have bought, how much they would have bought and also what they actually did as an alternative to accurately determine their actual loss. Furthermore, in the light of the principle of full compensation consumers should only be put in the position they would have been in but for the infringement; they should not be worse but neither should they be better off.

The demand function, characterized by its elasticity parameter, provides us with useful information at the aggregate level about how much consumption drops by raising the price. In this way, we can globally quantify the magnitude of the social loss due to lower consumption. However, what it cannot provide us with is to identify the location of each individual consumer within the demand curve and its corresponding perceived harm.

For those affected who stopped buying due to the overprice, there are two types of complexities. The first consists of demonstrating that they would have bought if the price remained at the competitive level. This comes with an inherent problem of immateriality since no transaction took place. The second problem is to identify the magnitude of the damage caused to each consumer in this segment. Assuming that it is confirmed that a given consumer stopped buying, how do you know where he is on the demand curve? It could be a consumer whose reserve price was slightly below the price of the cartel p_{Cart} and, therefore, he/she would be entitled to a similar compensation compared to those who kept buying. It could also be a buyer whose reserve price was in the vicinity of the competitive price p_E and, therefore, his/her loss would be minimal.

Among the consumers who stopped buying the item due to the higher price derived from the collusive agreement, we can distinguish two groups. First, there are those who switched to an option that was not their favourite and then there are those who simply did not buy anything at all. Those who have alternatives clearly experience a lower welfare loss than those who have no possibility of substituting and ultimately buy nothing. Note that the existence of substitutes does not depend only on the supply side of the market, that is, the possibility of switching to a good with similar attributes, but also on the demand side, which represents the consumer preferences.

From the point of view of identifying the type of consumers within these last subgroups, the matter is not completely simplified. Consumers who switched to alternative goods should receive less compensation than those who did not buy anything. However, the former will not have incentives to demonstrate the existence of the alternative purchase if by doing so they manage to imitate those who stopped buying and thus receive greater compensation. If the policy, due to problems of proof, leaves out from compensation those who stopped

[34] C Alexander, *Schadensersatz und Abschöpfung im Lauterkeits und Kartellrecht* (Mohr Siebeck 2010) 171: das deutsche Recht ist ‚misstrauisch' ('German law is sceptical').

buying because of the increase in prices, however. Then those who replaced the purchase would have incentives to show the evidence in order to obtain some retribution for damages.

Deterrence perspective

Apart from compensation, EU competition law, for instance, considers deterrence as a complementary goal.[35] The deterrence perspective is interesting in that it places less emphasis on neatly compensating every consumer but looks at the overall deterrent value of the amount that can be claimed and the likelihood with which such a claim can be successful. As said, it is possible to determine even the amount of the DWL, the challenge is to tie it to individual victims. The latter matters less from the deterrence perspective though.

From an economic perspective, the deterrence goal is approached in two facets[36]: It can be argued that to achieve deterrence it is sufficient to know the quantity of the infringers' gains and set the optimal sanction in relation to this.[37] The Chicago school inspired broader thinking about the optimal sanction in the sense that it promotes the need to internalize the full external costs of cartels.[38] In this way, it can be ensured that only socially detrimental conduct by firms can be considered as violations of competition law. The first approach boils down to determining the overcharge amount as the equivalent of the infringers' gain. The latter approach is broader and also includes the harm resulting from the deadweight loss which lies at the core of this contribution. Hence, only in the Chicago approach will the deadweight loss be taken into consideration.

If the infringing company must return the abnormal benefit resulting from the collusion plus the deadweight loss associated with this conduct, then it would be bearing all the external costs caused by its actions.[39]

Using the definitions indicated in Figure 1, if the compensation to be paid by the colluding companies also includes the social loss, then the net profit of the companies for the anticompetitive action can be expressed as:

$$\Delta\Pi = PS - (PS + DWL)$$

$$\Delta\Pi = -DWL$$

In the above equation, the first term on the right-hand side corresponds to the gain from collusion, whereas the term in brackets is the external effect on consumers. The price overcharge PS cancels out since it is a transfer between parties and what remains is only the social loss, which by definition nobody appropriates.

The net gain of the colluders, assuming a probability equal to one of being caught, would be then equivalent to the deadweight loss. And the bigger this loss is, the stronger is the deterrence effect of the compensation policy. Thus, under perfect enforcement, the compensation that includes the loss in sales achieves the full deterrence effect according to the view of

[35] Recital 5 Collective Redress Directive refers to the need to improve deterrence. This is very clearly a goal in US antitrust law, see D Crane, 'Toward a Realistic Comparative Assessment of Private Antitrust Enforcement' in D Gerard and I Lianos (eds), *Reconciling Efficiency and Equity: A Global Challenge for Competition Policy* (CUP 2019) 341–54, 344.

[36] See R Van den Bergh, *Comparative Competition Law and Economics* (Edward Elgar 2017) 399 EE, with further references.

[37] A Polinsky and S Shavell, 'Should the Liability be based on the Harm to the Victim or the Gain to the Injurer?' (1994) 10 J L Econ Org 427.

[38] G Becker, 'Crime and Punishment: An Economic Approach' (1968) 76 J Pol Econ 169ff.

[39] Whereas the deadweight loss lies at the core of this contribution, other social costs are imaginable, for instance if we think about umbrella effects or the effects on stock markets.

the Chicago School. This result is interesting, since it employs only one instrument, the compensation payment, to achieve simultaneously the two main objectives of competition law enforcement: deterrence and retribution to consumers.

Lately, some authors (Buccirossi, Marvao and Spagnolo)[40] have raised the existence of a conflict between damages actions and leniency programmes in cartel cases. Although the defecting firm would be exempt from the monetary and criminal sanction for its infraction, it would not be exempt from a lawsuit for damages, which reduces the incentive of cartel participants to take advantage of the mechanism. The reduction in cartel detection rates observed in recent years in parallel with the emergence of claims for damages would support this hypothesis.

The potential of private damages claims in the light of the deterrence and compensation perspectives

Currently, we do not see European cases that seek to compensate final consumers for the deadweight loss; more precisely, we hardly see any cases by consumers whatsoever.[41] However, let us look in a little bit more depth at the Chilean case: What is the relation between the redistributive and the allocative effect with a view to drugs available on prescription only? It seems reasonable to expect a low price elasticity of demand here. Given the importance of a product such as medication, consumers' reservation prices are high. For drugs based on prescription, there are in principle no substitutes available. Hence, consumers either still buy at a very high price, or if unable and in the absence of substitutes, abstain from buying the medication altogether. This would mean that the DWL triangle can be expected to be small as consumers urgently need the medication. So, there is a high redistributive and a low allocative effect. However, for those sales that are not going through, the DWL is likely to present the true size of the harm as the number of alternative purchases that consumers can make is very limited. The Supreme Court asserted that despite the low price elasticity of demand, an undefined number of consumers had had to withdraw from buying the products due to the price increase.[42] In terms of the overcharge, the price increase incidentally went beyond 50%.[43] Hence, referring to the Supreme Court judgment of 2012, the claimant side saw scope for claiming *damnum emergens*, the overcharge, and to claim compensation for the DWL.[44] In its 2019 judgment then, the court in essence followed an expert report submitted by the claimants' side. That expert report contained two calculations:[45] a conservative calculation resulting in a total damage of roughly 2021 million pesos [EUR 2,208,866] which the court followed in its judgment and a less conservative calculation resulting in more extensive total harm of ca 6945 million pesos [EUR 7,590,585].

The difference between the two calculation methods boils down to the difference in counterfactuals applied. In the latter case, the counterfactual was situated in the period during which the heavy price war went on. Therefore, there is a larger difference between counterfactual price and cartelized price, and hence a higher damage amount. The more

[40] P Buccirossi, C Marvão and G Spagnolo, 'Leniency and Damages: Where Is the Conflict?' (2020) 49 J Legal Stud 335.

[41] F Laborde, 'Cartel Damages Actions in Europe: How Courts have Assessed Cartel Overcharges' (2021), Concurrences No 3-2021, 232–42; Crane (n 6) 165.

[42] See Supreme Court judgment, septuagésimo sexto. On this TDLC, Sentencia No 119/2012, centésimo nonagésimo octavo: potentially the whole Chilean population is affected by this cartel.

[43] See Supreme Court judgment, considerando nonagésimo, párrafo décimo.

[44] See Demanda SERNAC (ie, the writ of summons by the Servicio Nacional del Consumidor, the Chilean consumer agency acting on behalf of the consumers) as received by the court on 1 February 2013, paras 34, as of para 41 on the deadweight loss.

[45] A Gonzalez, 'Estimación de Daños a Consumidores por Alza Coordinada de Precios de las Farmacias Ahumada, (2015) Cruz Verde y Salcobrand' <https://centrocompetencia.com/wp-content/uploads/2020/12/InformeDa%C3%B1osFarmacias-SernacAldoGonzalez.pdf> accessed 27 February 2022.

conservative estimation is based upon a counterfactual of average prices calculated over a longer period.

However, after an appeal filed by FASA, the Court of Appeals of Santiago, along with rejecting the appeals, decided to change the counterfactual scenario for determining damages. The price war scenario was chosen, so the magnitude of the damages, both due to overcharge and deadweight loss, increased by 157%. These higher damages liability only applied to FASA, the company that appealed the initial ruling. The other two pharmacies—CruzVerde and Salcobrand—did not see the amounts to be compensated altered because they did not appeal the initial sentence.

Why was such a judgment possible? To begin with Chile has rather advanced legislation concerning consumer collective redress.[46] This consumer collective redress procedure can apply here despite the applicability of special legislation like competition law. Ley 19.496 sets out in general that consumers can claim compensation.[47] Importantly, there is a special procedure by way of a representative action available when the collective and/or diffuse consumer interests are hurt (see Article 51 of Ley 19.496). Article 50 of Ley 19.496 defines 'collective interests' and 'diffuse interests':

> 'collective interest refers to actions that are promoted in defence of rights common to a determined or determinable group of consumers, linked to a supplier by a contractual bond, while diffuse interest refers to the actions that are promoted in defence of an indeterminate group of consumers affected in their rights)'.[48]

Chilean law thus does not insist on the criterion to link the harm very specifically to one consumer by also allowing compensation in cases where 'diffuse consumer interests' are hurt and the group of consumers is 'indeterminate'. This gives considerable procedural flexibility to award damages for a non-material damage component such as the deadweight loss that cannot easily be tied to the actual consumers.

It should be noted that the compensation scheme for the DWL did not envisage at the beginning compensating each consumer individually. Effectively the compensation for the 'diffuse interests' went to a children's foundation 'la Fundación de Ayuda al Niño Oncológico Sagrada Familia (Casa Familia)'.[49] In finding this proxy for compensating the actual victims, a group related to the conduct pursued in a collective process was searched for. The foundation takes in children with cancer from different institutions and regions who have limited resources and who require periodic and high-value medication. It received close to 205 million pesos [EUR 224,071] to complete the construction of a home, which can house children and their families in the terminal stages of cancer, to receive palliative care. This Foundation will also receive the money left over from victims of group 1 who did not claim their compensation amount for the overcharge.

[46] This is contained in Ley 19.496 Ley de Protección de los Derechos de los Consumidores (Consumer Rights Protection Law) (Ley 19.496).

[47] See in its art 3e): 'El derecho a la reparación e indemnización adecuada y oportuna de todos los daños materiales y morales en caso de incumplimiento de cualquiera de las obligaciones contraídas por el proveedor, y el deber de accionar de acuerdo a los medios que la ley le franquea' (English translation: The right to adequate and timely compensation and compensation for all material and moral damages in the event of non-compliance with any of the obligations contracted by the supplier, and the duty to act according to the means that the law allows).

[48] This is the English translation of: '*interés colectivo se refiere a acciones que se promueven en defensa de derechos comunes a un conjunto determinado o determinable de consumidores, ligados con un proveedor por un vínculo contractual, en tanto el interés difuso se refiere a las acciones que se promueven en defensa de un conjunto indeterminado de consumidores afectados en sus derechos*'.

[49] See <https://www.sernac.cl/portal/604/w3-article-60046.html> This became possible after passing a specific law, namely the 'circular interpretativa sobre mecanismos alternativos de distribución de indemnizaciones, reparaciones, devoluciones y compensaciones o afectaciones a los intereses colectives y difusos, Santiago, 6 Noviembre 2020'.

In the ruling of 2023, the Court of Appeal established a way to compensate the consumers affected belonging to group 2. Those who were forced to reduce their consumption due to the increase in drug prices must prove this condition through some means of proof. The total limit of compensation is that determined in the damage study for group 2, which amounts to 305 million pesos [Eur 333,700].

Compensating consumers who have been victims of a cartel based on the total harm perceived by them coincides with full deterrence principles only if cartel detection is perfect. In practice, however, enforcement is not perfect. The probability of being detected and sanctioned is strictly lower than one. According to Connor (2011), this likelihood ranges between 0.1 and 0.5.[50] Therefore, to achieve an effective deterrence, the sanction applied to the offender must take this into consideration and go beyond the actual harm caused. In competition practice, we see the use of fines as well as of compensation payments. This combined approach was also pursued with a view to the Chilean price-fixing pharmacy cartel. Whereas fines are traditionally said to serve deterrence and compensation payments, which as the name suggests, are meant to compensate, the division of labour between the two types of sanctions is not so clear. The effect that fines have on deterrence is typically limited. We must remark that at the time of the infringement, the maximum fines in Chile were capped in absolute terms.[51] After the reform of the competition law of 2016, the fines were established in proportion to the sales of the market affected by the anti-competitive action. Therefore, the deterrent power of sanctions has become more effective. In the EU, there is also a system of public enforcement apart from private enforcement. The deterrent value of the fining regime can likewise be put in question.[52] Compensation payments are usually limited by the actual amount of the harm.[53] Therefore, where the probability of detection is less than one, a compensation mechanism is not enough to deter cartelization and therefore an additional instrument, fines, is required to satisfy such purpose. From a theoretical point of view also, over-deterrence would need to be prevented. Hence, the combination of a fine and a compensation payment should at a maximum ensure that the tortfeasor internalizes the externality. Exploring the avenue of compensation payments for both the overcharge and the DWL is specifically so interesting because it serves both goals provided that we follow the Chicago reasoning.

The potential of private enforcement to serve both perspectives in Europe is crucially determined by the latest developments regarding collective redress. The final text of the Damages Directive does not mention collective redress. After all, for many years, the most far-reaching EU policy document was a non-binding recommendation,[54] but finally a Collective Redress Directive to institutionalize EU-wide collective redress mechanisms was enacted in 2020.[55] Whereas the mechanism is as such not applicable to competition law, Member States are in principle free to extend it to competition law as well.[56] Some

[50] J Connor, 'Cartel Detection and Duration Worldwide' Competition Policy International Antitrust Chronicle 2 (28 September 2011) 2–10.

[51] In the former competition law (2009), the maximum fine for collusion was 30,000 UTA, which is equivalent to 24.7 million Euros.

[52] Van den Bergh (n 35) 401.

[53] Except for jurisdictions that allow forms of punitive damages.

[54] Commission Recommendation of 11 June 2013 on common principles for injunctive and compensatory collective redress mechanisms in the Member States concerning violations of rights granted under Union law, OJ L 201, 26 July 2013, 60–65.

[55] Directive of the European Parliament and of the Council of 25 November 2020 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC, OJ L 409, 4 December 2020, 1–27 (Collective Redress Directive).

[56] This is, for instance, the current plan in Germany, see Legislative Draft on the implementation of the Collective Redress Directive of 24 April 2023, *Drucksache* 20/6520 [*Entwurf eines Gesetzes zur Umsetzung der Richtlinie (EU) 2020/1828 über Verbandsklagen zum Schutz der Kollektivinteressen der Verbraucher und zur Aufhebung der Richtlinie 2009/22/EG (Verbandsklagenrichtlinienumsetzungsgesetz—VRUG)*].

Members States have viable collective redress mechanisms in place that, anyway, can be used in the competition law context.[57] Let us briefly assess the European requirements as set out in the latest Directive in the light of a pragmatic approach to the deadweight loss: To make compensation for the DWL a reality, it would be crucial to have an opt-out mechanism which allows a group to be defined more loosely than an opt-in one. This, the European Directive does provide for. Member States are free in the design choice when it comes to the question of when the individual consumers concerned explicitly or tacitly express their wish to be represented (Article 9[2]).[58] Importantly, Article 9(5) grants certain flexibility regarding the degree by which the consumers have to be identified when it reads: 'Where a redress measure does not specify individual consumers entitled to benefit from remedies provided by the redress measure, it shall at least describe the group of consumers entitled to benefit from those remedies.'[59] Hence, describing a group of consumers suffices even for the context of a redress measure. This is interesting for the purpose of claiming compensation for the deadweight loss. Again, to a certain extent, as in Chilean law Ley 19.496, it is not necessary for there to be a concrete link to a specific consumer. Reading this in combination with the requirement that consumers do not need to explicitly express their wish to participate in the collective action in question but that a tacit expression suffices, seems to give certain leeway to experiment. Furthermore, that redress can then be claimed within a specified time if, however, redress funds remain, and Member States *ex ante* must lay down the destination of such (Article 9 [7]). There is, hence, also quite some scope granted in terms of the remedy. This allows an optimistic assessment that compensation for the deadweight loss which serves both, a compensation and a deterrence goal, is something that can be viable also in the European context.

3. CONCLUSION

The proceeding for damages against the retail pharmacies cartel in Chile is a remarkable case where the sanctioned companies, in addition to compensating consumers for the overprice, must pay damages for the deadweight loss caused by the collusion. The latter type of damage corresponds to the lower consumption derived from the rise in prices typical of the cartel. This would be an unprecedented case of compensation to scattered customers in antitrust lawsuits in Chile and to the best of our knowledge it would also be unique in the European context.

The magnitude of the damage due to social loss is not negligible. According to the Chilean court ruling, based on the study presented on behalf of the consumer protection agency, this damage would correspond to between 16% and 18% of the damage for the cartel's overpricing.

[57] One example would be the Netherlands: as stipulated in Act of 20 March 2019 amending the Dutch Civil Code and the Dutch Civil Procedural Code to allow the handling of mass damages in a collective action (Collective Redress of Mass Damages Act) (*Wet van 20 maart 2019 tot wijziging van het Burgerlijk Wetboek en het Wetboek van Burgerlijke Rechtsvordering teneinde de afwikkeling van massaschade in een collectieve actie mogelijk te maken [Wet afwikkeling massaschade in collectieve actie]), Staatsblad* 2019, 130.

[58] This resembles the differentiation between opt-in and opt-out regimes, but the formulation is also criticised for lack of clarity, see D Fairgrieve and R Salim, 'Collective Redress in Europe: Moving Forward or Treading Water' (2022) 71 ICLQ 465, 471. Different rules apply to consumers residing outside the Member State in question, see para 3.

[59] The Directive has undergone quite a number of changes during the legislative procedure. This element, however, was already present in the Proposal for a Directive of the European Parliament and of the Council on representative actions for the protection of the collective interests of consumers, and repealing Directive 2009/22/EC, COM/2018/0184 final – 2018/089 (COD) (Proposal). This is in line with art 5b(4) of the Proposal which reads: 'If the redress measure does not specify individual consumers entitled to benefit from remedies provided by the measure, it shall at least describe the group of consumers entitled to benefit from those remedies.'

The main difficulty in applying compensation to diffuse consumers for deadweight loss lies in the difficulty of identifying those who stopped buying or reduced their level of consumption due to the rise in the good's price. Unlike those who continued to buy post-cartel, there is an inherent problem of immateriality that severely hinders the demonstration of belonging to the universe of users who were forced to stop purchasing the goods due to overpricing. Economics can be helpful here. From an economic point of view, as outlined, it is quite possible to calculate the damage that this group of consumers overall has suffered.

Faced with the problem of identifying the consumers affected by this type of damage, in the Chilean case the amount of money corresponding to the loss of efficiency was donated by the sanctioned pharmacies to charitable institutions. In this way, the compensation payment does not strictly adhere to the principles of damages law in that it truly compensates the individual victims. However, it does ensure a certain degree of deterrence and reinforces the dissuasive effect of the punishing system in competition policy. By including the social loss in the enforcement response, we come closer to the Chicago school paradigm, according to which injuring companies must bear all the external costs produced by their actions. This, of course, includes the deadweight loss.

If European law seeks to live up to its principle of full compensation and the secondary goal of deterrence in private enforcement, there is certainly a role to be played by the DWL. European damages law principles seem supportive of this development and the latest developments in collective redress allow an optimistic take on seeing a case like the Chilean one also in the European context. As stated in the very beginning, it was beyond the scope of this article to consider the optimal interplay with public enforcement in depth.

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