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A Primer on Damages of Cartel Suppliers – Determinants, Standing US vs. EU and Econometric Estimation

Eckart Bueren and Florian Smuda

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Non-technical summary

Private enforcement of competition law is on the rise worldwide and a major item on the EU competition policy agenda. The relevant provisions in the EU and the US confer a right to damages to “any individual” and “any person” harmed by a cartel. However, while there is much research about actions for damages by cartel customers, the question whether and how other parties that may incur losses due to a cartel can obtain damages is usually neglected and largely open in Europe. This paper analyses the issue with respect to suppliers of a downstream cartel from a comparative law and economics perspective.

First, we show that the losses such cartel suppliers incur are driven by three effects: Cartel members lower sales and correspondingly their input demand (*direct quantity effect*), which in turn affects the price suppliers can charge (*price effect*) and their production costs (*cost effect*).

We then analyze whether suppliers are entitled to claim these losses as damages in the two leading competition law regimes, the US and the EU. We find that, while the majority view in the US denies standing, the emerging position in the EU and important member states is to grant supplier standing. We argue that the case law in *Courage v. Crehan* implies that the type of loss which the competition provisions are intended to prevent is broader in the EU than in the US. In particular, pursuant to EU law, a right to damages does not require that the loss suffered occurred in the same market than the lessening of competition that makes the defendant’s conduct illegal. As a consequence, both Germany and England have abandoned important traditional limitations on standing. We argue that the more generous approach to standing in the EU compared to the US can be justified in view of the different institutional context and the goals assigned to the right to damages in the EU.

According to our analysis cartel suppliers in principle have a right to damages in the EU, as no general restrictions on standing ought to apply; however, the causation requirement will be an important hurdle to clear in a particular case. Sound econometric estimation techniques are of major importance to overcome that obstacle. In this respect, we finally present an econometric approach based on residual demand estimation that allows to quantify all determinants of cartel suppliers’ damages.

Our results therefore suggest that supplier damage claims are a viable option that can contribute to full compensation and greater cartel deterrence in the EU irrespective of further controversial collective action mechanisms.

Das Wichtigste in Kürze

Die private Durchsetzung des Wettbewerbsrechts gewinnt weltweit kontinuierlich an Bedeutung und ist ein zentrales Anliegen der europäischen Wettbewerbspolitik. Die maßgeblichen Vorschriften in der EU und den USA gewähren dem Wortlaut nach „jedermann“ bzw. „any person“, der einen Kartellschaden erlitten hat, einen Anspruch auf Ersatz. Allerdings konzentrieren sich Forschung und öffentliche Diskussion bisher fast ausschließlich auf Klagen von Kartellabnehmern; ob und wie andere mögliche Betroffene Ersatz verlangen können, ist demgegenüber kaum untersucht und in Europa weitegehend ungeklärt. Das vorliegende Diskussionspapier untersucht die Frage für Zulieferer, welche Verluste aufgrund eines nachgelagerten Preiskartells ihrer Abnehmer erleiden, aus rechtsökonomischer und rechtsvergleichender Perspektive.

Wir zeigen zunächst, dass die Einbußen der Zulieferer von drei Effekten bestimmt werden: Einem direkten Nachfrageeffekt infolge der verringerten Inputnachfrage der Kartellmitglieder, einem dadurch ausgelösten Effekt auf den erzielbaren Verkaufspreis sowie einem Kosteneffekt.

Anschließend untersuchen wir, ob Zulieferer entstehende Einbußen in den USA und der EU, den beiden führenden Wettbewerbsrechtsordnungen, als Schadensersatz geltend machen können. Während in den USA eine Klagebefugnis überwiegend abgelehnt wird, zeichnet sich für das Unionsrecht sowie in wichtigen Mitgliedsstaaten die Ansicht ab, auch Lieferanten ein Recht auf Schadensersatz zuzubilligen. Wir legen dar, dass gem. der Rechtsprechung im Fall *Courage v. Crehan* der Kreis der Schäden, welche das Kartellverbot verhindern soll, in der EU breiter definiert ist als in den USA. Insbesondere setzt ein Recht auf Schadensersatz nach Unionsrecht nicht voraus, dass die erlittenen Verluste in demselben Markt eingetreten sind, auf dem das Kartell den Wettbewerb rechtswidrig beeinträchtigt. Um dieser Vorgabe gerecht zu werden, haben Deutschland und England wichtige herkömmliche Einschränkungen des Rechts auf Kartellschadensersatz aufgegeben. Wir argumentieren, dass sich der großzügigere Ansatz des Unionsrechts im Vergleich zu den USA mit Unterschieden im institutionellen Kontext und den Zielen begründen lässt, die das Recht auf Schadensersatz in der EU verfolgt.

Aus den Ergebnissen der Untersuchung folgt, dass Kartellzulieferern in der EU im Grundsatz ein Recht auf Schadenersatz zusteht, da insoweit keine allgemeine Beschränkung der Ersatzberechtigung eingreift. Allerdings erweist sich in einem konkreten Fall der Nachweis eines Kausalzusammenhangs zwischen Kartell und (Zulieferer-)Schaden erfahrungsgemäß als wichtige Hürde. Fundierte ökonometrische Schätzverfahren sind von zentraler Bedeutung, um

dieses Hindernis zu überwinden. Das Diskussionspapier entwickelt dazu abschließend einen Ansatz basierend auf einem modifizierten Residualnachfragemodell, der es ermöglicht, alle drei Bestimmungsfaktoren von Zuliefererschäden zu quantifizieren.

Unsere Ergebnisse sprechend demnach dafür, dass Schadensersatzklagen von Kartellzulieferern eine gangbare Möglichkeit sind, um eine möglichst umfassende Kompensation von Kartellschäden und eine größere Abschreckung von Kartellrechtsverstößen auch ohne zusätzliche umstrittene Mechanismen kollektiver Rechtsdurchsetzung zu erreichen.

A PRIMER ON DAMAGES OF CARTEL SUPPLIERS – DETERMINANTS, STANDING US VS. EU AND ECONOMETRIC ESTIMATION

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Abstract

While private actions for damages by customers against price-cartels receive much attention, the treatment of other groups affected by such conspiracies is largely unresolved. This article narrows the research gap with respect to suppliers to a downstream price cartel. First, we show that such suppliers incur losses driven by a direct quantity, a price and a cost effect. We then analyze whether suppliers are entitled to claim these losses as damages in the two leading competition law regimes. We find that, while the majority view in the US denies standing, the emerging position in the EU and important member states is to grant supplier standing. We argue that this can indeed be justified in view of the different institutional context and the goals assigned to the right to damages in the EU. We finally present an econometric approach based on residual demand estimation that allows to quantify all determinants of cartel suppliers' damages, thereby showing that supplier damage claims are a viable option in practice that can contribute to full compensation and greater cartel deterrence.

Keywords Competition policy, cartels, suppliers, damage quantification, standing, private enforcement, comparative law

JEL Class L41, K21

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I. Introduction

Private actions for damages from competition law infringements are on the rise worldwide.[1] In Europe, having remained in the shadows for long,[2] they are at the heart of the legal and policy debate since the Court of Justice (ECJ) held in *Courage* that[3]

> "The full effectiveness (…) and, in particular, the practical effect of (…) Article [101(1) TFEU[4]] would be put at risk if it were not open to any individual to claim damages for loss caused to him by a contract or by conduct liable to restrict or distort competition.[5]"

Five years later, the ECJ added in *Manfredi* that

> "It follows that any individual can claim compensation for the harm suffered where there is a causal relationship between that harm and an agreement or practice prohibited under Article [101 TFEU[6]].[7]

The court's holding that "any individual" has a right to damages strikingly resembles the language in Sec. 4 of the Clayton Act[8] stipulating that

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1 *Rubinfeld*, in: Elhauge, Research Handbook on the Economics of Antitrust Law, 2012, p. 378.

2 *Whish/Bailey*, Competition Law, 7th ed. 2012, p. 319; *Romain/Gubbay*, The European Antitrust Review 2011, 47, 51. This is not to say that private enforcement had been negligible or even inexistent. However, many actions did and do relate to other remedies than damages (for Germany see *Peyer*, 8 J Comp L & Ec 331, esp. 348 et seqq.; concerning the UK *Rodger*, 29 E.C.L.R. 96-116).

3 On the ground-braking character of this judgment see *Italianer*, Public and private enforcement of competition law, 5th International Competition Conference 17 February 2012, Brussels.

4 At the time of the judgment article Article 85(1) EC.

5 Case C-453/99 – *Courage*, [2001] ECR I-6297, para 26.

6 At the time of the judgment art. 81 EC.

7 Case C-295/04 to C-298/04, *Manfredi*, [2006] ECR I-6619, para 61.

8 15 U.S.C. § 15.

"(…) any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue therefor (…) and shall recover threefold the damages (…)."

However, the US courts have developed important limitations on standing, whereas the ECJ's dicta seem to exclude any restriction besides causality. Nonetheless, so far the European private enforcement debate has focused almost exclusively on purchasers,[9] neglecting the numerous other parties that may incur losses from a cartel. In particular, while it is accepted that suppliers to a buying cartel are entitled to compensation,[10] it is mostly overlooked that suppliers to "ordinary" sellers' cartels regularly suffer losses, too. Section 2 explains the determinants for their harm. Section 3 analyses the legal standards for supplier standing in the two leading competition law regimes, the US and the EU. We show that, while supplier standing is mostly denied in the US, in the EU the type of loss which the competition provisions are intended to prevent is broader, but the question of supplier standing still unsettled. As the EU-law gaps are filled by national legal systems, we exemplify the interplay of the ECJ's case law and the law of the member states by way of outlining the legal situations in England and Germany, i.e. one common law and one continental law country. Section 4 discusses the case for and against supplier standing in Europe, examining whether lessons can be drawn from the US approach. Section 5 complements our findings by showing how supplier damages can be estimated econometrically with an adjusted residual demand model. Section 6 concludes.

II. Upstream cartel damages in a vertical production chain

1. Graphical analysis

A competition law infringement can be expected to cause, as the US Supreme Court has put it, ripples of harm to flow through the economy,[11] especially if it occurs in a vertical production chain. A cartel in one layer produces numerous effects in the layers up- and

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[9] Particular attention has been devoted to the passing on defence, see e.g. *Commission Staff working* accompanying the White Paper on Damage actions for breach of the EC antitrust rules, 2.4.2008, SEC(2008) 404, p. 62-69 and recently the *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) 404 final, p. 17 et seq, and art. 12-15; *Nebbia*, 33 E.L.Rev. 23, 36-39 (2008); with respect to German, English and Dutch law *Maton et al.*, 2 J of Eur Comp L & Practice, 489, 491, 500, 506 (2011); summary from eleven jurisdictions *International Competition Network Cartels Working Group*, Interaction of Public and Private Enforcement in Cartels Cases, Report to the ICN annual conference, Moscow, May 2007, p. 11-13; mainly with respect to German law *Wurmnest*, 6 German L. J. 1173, 1182 et seqq. (2005). For economic perspectives on the quantification of purchaser damages and the role of a passing-on defense see, e.g., *Hellwig,* Private Damage Claims and the Passing-On Defense in Horizontal Price-Fixing Cases: An Economist's Perspective, Reprints of the Max Planck Institute for Research on Collective Goods, Bonn 2006/22 (2006); *Verboven/Van Dijk*, J of Ind Econ, 57(3), pp. 457-491 (2009). For general recent overviews about damages estimation techniques in particular for downstream damages see *Rubinfeld*, in: Elhauge (fn. 1), p. 378, 379-391; *de Coninck*, Concurrences 1-2010, 39-43.

[10] See for the US *Areeda/Hovenkamp*, Antitrust law, Vol. IIA, 3rd. ed. 2007, ¶ 350 p. 234 et seq. (majority view of the US-courts, however with occasional aberrant judgments); for European Competition law cf. the recent proposal for a damages directive (fn. 9), COM(2013 404 final, p. 16, and generally on the illegality of buying cartels *Ezrachi*, 8 J of Competition Law and Economics 47, 55 et seqq.; *Elhauge/Geradin*, Global Competition Law and Economics, 2nd ed. 2011, p. 249 et seqq. (for US, EU and other nations); for German Law *Bornkamm,* in: Langen/Bunte, GWB, 11th Ed. 2010, § 33, Rn. 36; *Emmerich*, in: Immenga/Mestmäcker, GWB, 4th. Ed. 2007, § 33, Rn. 28; for English law cf. *Brealey/Green*, Competition Litigation, 2010, para 2.02.

[11] *Associated General Contractors v. California State Council of Carpenters*, 459 U.S. 519, 534, 103 SCt. 897, 907.

downstream.[12] Direct purchasers pay higher input prices (overcharge) and, by consequence, generally lower their demand. Hence, the cartel members have to balance the positive effect on their profits from a higher selling price with the negative effect from a lower sales volume, which prompts them to reduce their production and – correspondingly – their input demand. As a consequence, direct suppliers to a sellers' cartel[13] sell less, too. The input reductions percolate through the upstream layers, so that the sales of indirect cartel suppliers fall as well.

To illustrate the determinants of supplier damages, assume a monopolist that produces with increasing marginal costs *MC(x)* and sells his product to a number of downstream firms. For simplicity, let the monopolist's selling price equal the downstream firms' input costs[14] (Figure 1).

At the outset, the firms downstream the monopoly layer compete. The monopolist confronts the downward sloping linear inverse demand function $p(x)^*$ and the marginal revenue function $MR(x)^*$. Maximising his profits, he sells in equilibrium quantity x^* at price p^*.

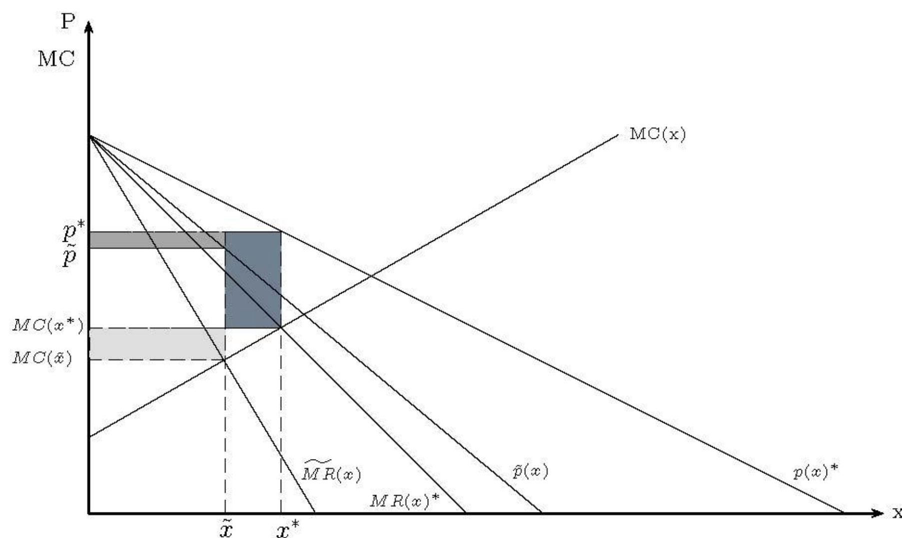

Figure 1: Damages suffered by a direct cartel supplier[15]

If the monopolist's customers start to collude on their product market, i.e. jointly maximise their profits, they charge a higher price and sell less of their output.[16] The supplier monopolist faces an ensuing fall in demand, that turns his inverse demand curve inward and yields the function $\tilde{p}(x)$.[17] The monopolist's new optimum, $\tilde{x}$ and $\tilde{p}$, is characterized by lower demand,

[12] Besides, a cartel might also influence neighbouring layers, e.g. through umbrella effects.

[13] This scenario has to be distinguished from a – comparably rare – buyers' cartel in which cartel members use their market power on the demand side to force down the input price.

[14] This abstracts from additional costs for other inputs necessary to process the product, such as electricity or labour. This simplifies the analysis, however does not change the fundamental results.

[15] This figure is similar to *Han et. al* (2009) who illustrate the case of an "undercharge" in a model with numerous layers up- and downstream the cartel stage. See *Han, M. A., .Schinkel, M. P and Tuinstra, J.*, The Overcharge as a Measure for Antitrust Damages, Amsterdam Center for Law & Economics Working Paper 8, 2009, p. 25.

[16] Downstream the cartel, there may be only one layer of cartel purchasers or several layers with direct and indirect purchasers. We do not specify the situation downstream the cartel but concentrate on the damages suffered by a direct cartel supplier.

[17] Note that the inverse demand function does not shift, but turns inwards in case of a sellers' cartel, because we assume that the cartel members' maximum willingness to pay for inputs does not change due to collusion. Thus, graphically, the intercept of the inverse demand function remains the same. By contrast, a buyers'

a lower selling price, and lower marginal cost. Accordingly, his losses are determined by three effects:

(1) A *direct quantity effect* $(x^* - \tilde{x})(p^* - MC(x^*))$ due to the cartel members' lower input demand, illustrated by the darkly shaded rectangle between x_1 and x_2. The effect equals the difference between the supplier's sales volumes under downstream competition and collusion, multiplied by his price-cost margin under competition. The direct quantity effect is generally negative[18] and accounts for the main part of supplier damages.
(2) A *price effect* $(p^* - \tilde{p})\tilde{x}$, graphically illustrated by the greyly shaded rectangle between p_1 and p_2. It equals the difference of the monopolist's output price under downstream competition and collusion, multiplied by the quantity sold to the cartel. In the simplified setting above, the price effect is negative. Generally, depending on the circumstances, it might also be positive or zero.[19]
(3) A *cost effect* $(MC(x^*) - MC(\tilde{x}))\tilde{x}$ as a result of the supplier's lower production costs, illustrated by the lightly shaded rectangle between $MC(x_1)$ and $MC(x_2)$. The cost effect consists of the difference between the supplier's marginal costs when producing the output x_1 under downstream competition and x_2 under collusion, multiplied by the actual sales volume. Depending on the cost function, it may either be positive, negative or zero.[20]

In total, the damages of a direct cartel supplier amount to

$$D = [(x^* - \tilde{x})(p^* - MC(x^*))] + [(p^* - \tilde{p})\tilde{x}] - [(MC(x^*) - MC(\tilde{x}))\tilde{x}].$$

In the simplified model above, the cost reduction due to lower production outweighs the lower selling price ("undercharge") and counteracts the direct effect from a lower sales volume. It would thus be inappropriate and overstate the supplier's harm to measure damages by looking only at the direct quantity effect. It is worth noting, however, that if marginal costs are constant, price and cost effects vanish, and only a direct quantity effect occurs.[21]

2. General formal framework

While the example of a supplier monopolist is straightforward, the general case with several firms on each layer is practically more relevant. The effects introduced above also exist in such a scenario. To illustrate, assume a vertical production chain comprising two layers upstream the cartel, which all have a one-to-one input-output-relation. On the top layer, m identical firms (indirect cartel suppliers) produce a non-substitutable good with constant marginal costs c. They sell it at a unit price q to n identical firms in the second layer (direct cartel suppliers). The n firms process the good and sell it at unit price p to identical firms in the third layer. Abstracting from additional costs, the selling price q of the m first layer firms equals the marginal costs of the n second layer firms. Total industry output is given as

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cartel would reduce its participants' willingness to pay and thereby cause an inward shift of the inverse demand curve.

[18] Negative in the sense that the supplier's profit decreases compared to a competitive situation downstream.

[19] See *Han et al.* (fn. 15) , p. 7.

[20] In our example with increasing marginal costs, the effect is positive. Assuming constant marginal costs, the cost effect would completely vanish. In case of increasing economies of scale, the effect could also be negative, then increasing the overall damage.

[21] For a formal prove of this aspect, see *Han et al.* (fn. 15)..

$$X = m \cdot x_{j1} = n \cdot x_{i2},$$

where x_{i2} and x_{j1} are quantities of a representative firm *i* and *j* on the second and first layer, respectively. Total output corresponds to the demand of the firms at the third layer, who are assumed to initially compete and subsequently collude.[22] The upstream selling prices are given as *q(X)* and *p(q(X))*: The output price at the second layer *p(q(X))* depends on input costs *q(X)*, which depend on overall quantity *X*.

Let the equilibrium values under competition be

$$X^* = \sum_{i=1}^{n} x_{i2}^* = \sum_{j=1}^{m} x_{j1}^*, \qquad q^* = q(X^*), \qquad p^* = p\big(q(X^*)\big),$$

and under collusion

$$\tilde{X} = \sum_{i=1}^{n} \tilde{x}_{i2} = \sum_{j=1}^{m} \tilde{x}_{j1}, \qquad \tilde{q} = \tilde{q}(\tilde{X}), \qquad \tilde{p} = \tilde{p}\left(q(\tilde{X})\right).$$

For simplicity, we introduce p^* and q^* as shortcuts for $p(q(X^*))$ and $q(X^*)$ and drop the arguments of the equilibrium values in the following.[23]

The losses two representative firms *j* and *i* in the first and the second layer incur because of the downstream sellers' cartel equal the difference between their profits under competition and collusion. The respective profits of a representative direct cartel supplier *i* amount to

$$x_{i2}^* = (p^* - q^*)x_{i2}^* \quad \text{and} \quad \tilde{x}_{i2} = (\tilde{p} - \tilde{q})\tilde{x}_{i2}$$

Subtracting π^*_{i2} from $\tilde{\pi}_{i2}$ and rearranging parameters yields his lost profits:

$$\Delta\pi_{i2} = \left[\left(x_{i2}^* - \tilde{x}_{i2}\right)(p^* - q^*)\right] + \tilde{x}_{i2}(p^* - \tilde{p}) - \tilde{x}_{i2}(q^* - \tilde{q}).$$

Likewise, the profit of a representative indirect cartel supplier *j* before and after collusion is

$$x_{j1}^* = (q^* - c)x_{j1}^* \quad \text{and} \quad \tilde{\pi}_{j1} = (q - c)\tilde{x}_{j1},$$

yielding cartel induced losses of

$$\Delta\pi_{j1} = \left[\left(x_{j1}^* - \tilde{x}_{j1}\right)(q^* - c)\right] + \tilde{x}_{j1}(q^* - \tilde{q}).$$

Table 1 summarizes supplier damages and decomposes them into the quantity-, price- and cost effects described above:

Table 1: Decomposition of damages

Direct Supplier	$\Delta\pi_{i2} = \left[\left(x_{i2}^* - \tilde{x}_{i2}\right)(p^* - q^*)\right] + \tilde{x}_{i2}(p^* - \tilde{p}) - \tilde{x}_{i2}(q^* - \tilde{q})$
Quantity effect	$\left(x_{i2}^* - \tilde{x}_{i2}\right)(p^* - q^*)$
Price effect	$\tilde{x}_{i2}(p^* - \tilde{p})$
Cost effect	$\tilde{x}_{i2}(q^* - \tilde{q})$
Indirect Supplier	$\Delta\pi_{j1} = \left[\left(x_{j1}^* - \tilde{x}_{j1}\right)(q^* - c)\right] + \tilde{x}_{j1}(q^* - \tilde{q})$
Quantity effect	$\left(x_{j1}^* - \tilde{x}_{j1}\right)(q^* - c)$
Price effect	$\tilde{x}_{j1}(q^* - \tilde{q})$

[22] We assume that all firms either collude or compete. Firms are therefore assumed not only to be identical with respect to production costs and other firm characteristics, but also to take concurrent decisions about whether to form a cartel.

[23] Likewise, we use the shortcuts $\tilde{p}$ and $\tilde{q}$ instead of $\tilde{p}\left(q(\tilde{X})\right)$ and $\tilde{q}(\tilde{X})$ in the following.

Cost effect | -

Compared to the graphical illustration, three aspects of this general case should be noted:
First, as in the scenario of a supplier monopolist, lower input demand by cartel members may cause either higher upstream prices, lower prices or no price change at all. However, irrespective of the model specific assumptions, the most obvious strategic reaction of direct and indirect suppliers to decreasing demand is to lower their own output prices in order to mitigate and counteract the loss in demand.
Second, assuming that $m = n$ and $\tilde{x}_{i2} = \tilde{x}_{j1}$, the price effect of the indirect supplier and the cost effect of the direct supplier exactly match. The direct supplier loses from lower sales but takes advantage of lower input costs. The indirect cartel supplier does not face a cost effect if marginal costs are constant at the top layer and is therefore more vulnerable to the direct quantity effect.
Third, the number of firms on each upstream layer strongly influences suppliers' damages. Assuming *Cournot* competition, the direct quantity effect sustained by one cartel supplier is decreasing in the number of symmetric cartel suppliers in the market. As a result, the follow-on effects on prices and costs are also decreasing in the level of competition on the upstream layers.

III. Supplier standing: US vs. EU compared

Whereas economic analysis clearly identifies losses to suppliers of a sellers' cartel, it is much less clear whether these suppliers are legally entitled to damages. In this respect, it should be noted that, in case of an international cartel, the countries affected usually provide for very different substantive and procedural rules governing actions for damages from which claimants may often choose to a certain extent:[24] In Europe, the *Brussels I* Regulation[25] – according to a widely shared, but controversial view – usually offers claimants alternative courts of jurisdiction in several member states,[26] and, building on that, the *Rome II* Regulation[27] roughly speaking allows plaintiffs to base their claims against all cartel members

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[24] *Brealey/Green* (fn. 10), paras 5.02 et seq.; *Jones/Sufrin* (fn. 74), p. 1219.

[25] Council Regulation (EC) No. 44/2001 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters ("Brussels I"), OJ [2001] L 12/1.

[26] See *Whish/Bailey* (fn. 2), p. 308; *Schreiber*, KSzW 01.2011, 37, 39. Firstly, a company can generally be sued in the member state where it is domiciled (Art. 2 I, Art. 60 I Brussels I Regulation); secondly, a cartel member can be sued in the place where the harmful event occurred (Art. 5 III 3 Brussels I Regulation), i.e. either where the event which gave rise to the harm occurred, the courts of the state of this place having jurisdiction to award damages for all the harm caused, or where the harm arose, the courts of that state having jurisdiction only in respect of the damage caused in that state (Case C-68/09, *Shevill et al. v. Press Alliance SA*, [1995] ECR I-415, 462 para 33); thirdly, if cartel members are domiciled in different EU-countries, Article 6 I Brussels I Regulation allows to sue all of them in the courts of the state where (at least) one cartel member is domiciled, provided that all claims are so closely connected that it is reasonable to hear and determine them together – which is often considered to be the case with respect to cartel damages, *Maton et al.*, 2 J of Eur Comp L & Practice, 489 (2011); *Provimi Limited v. Aventis Animal Nutrition SA and Others* [2003] E.C.C. 29, p. 353, para. 45-47; *Cooper Tire & Rubber Company and Others v. Shell Chemicals UK Limited and Others* [2009] EWHC 2609 (Comm), para. 34 et seqq., especially para. 64; confirmed in *Cooper Tire Rubber & Rubber Company and Others v. Dow Deutschland Inc and Others* [2010] EWCA Civ864 para. 44; the details are however in dispute, see further *Basedow/Heinze*, in: *Bechtold/Jickeli et al.*, Recht Ordnung und Wettbewerb, 2011, p. 63, 69 et seq.; *Tang*, 34 E.L. Rev. 80 (2009).

[27] Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations (Rome II), OJ [2007] L 199/40.

on the law of the member state where they file the action.[28] This legislation has opened up a kind of competition between national fora, the decisive criterion being which offers the best prospects to claimants.[29] In case of transatlantic cartels, claimants may furthermore decide to sue in the US.[30] It is thus very important to compare and evaluate different approaches to standing of "non-standard" cartel victims, of which cartel suppliers are practically most relevant.

1. US federal law

a) General standard for standing

The superficially clear[31] wording of Sec. 4 Clayton Act seems to encompass every harm.[32] However, the US courts have declined to interpret the statute literally.[33] The Supreme Court argued in *Associated General Contractors*, the leading case on antitrust standing,[34] that the legislative history of Sec. 4 of the Clayton Act requires construing the provision in the light of its common-law background and the contemporary legal context in which Congress acted.[35] The court concluded that – contrary to the wording – the remedy cannot encompass every harm which can be traced to alleged wrongdoing. Over time, a two-pronged approach has developed to limit the universe of potential plaintiffs:[36]

First, the plaintiff must have suffered "antitrust injury", defined as "injury of the type the antitrust laws were intended to prevent and that flows from that which makes the defendants' acts unlawful."[37] This is mainly to inhibit suits that would pervert the antitrust laws into an avenue to dampen competition.[38]

Second, the plaintiff must have standing,[39] that is he must be considered an efficient enforcer of the antitrust laws.[40] This requires some analysis of the directness or remoteness of the

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[28] Art. 6 III lit. b) of the Rome II Regulation under certain conditions allows a plaintiff who concentrates his actions against all cartel members in one court pursuant to Art. 6 paragraph 1 of the Brussels I Regulation (see fn. 26) to base all his claims on the law of the member state where he files the action (*lex fori*). Again, the details are unresolved; see further *Brealey/Green* (fn. 10), paras 6.08 et seq., 6.14 et seqq.; *Mankowski*, WuW 2012, 947 et seqq.

[29] See *Neumann*, Juve 14 (2011), No. 12, 87; *Whish/Bailey* (fn. 2), p. 308.

[30] Claims for damages can be brought in the USA insofar as the cartel had effects there which were more than remote or indirect in nature, see briefly *Whish/Bailey* (fn. 2), p. 309; for in depth analyses *Huffman*, 60 SMU Law Review 103 (2007); *Connor/Bush*, 112 Penn State Law Rev. 813 (2007-2008).

[31] *Areeda/Kaplow*, Antitrust Analysis, 6th. ed. 2004, ¶ 144 p. 60.

[32] See *Associated General Contractors* (fn. 11), 459 U.S. 519, 529.

[33] *Blue Shield of Virginia et al., v. McCready*, 457 U.S. 465, 476, 102 S.Ct. 2540. 2547; *Todorov v DCH Healthcare Auth.*, 921 F.2d 1438, 1448 (11th Cir. 1991).

[34] *Todorov* (fn. 34), 921 F.2d 1438, 1448 (11th Cir. 1991); *Altman/Pollack*, in: Callmann on Unfair Competition, Trademarks and Monopolies, 4th ed., Database updated December 2012, § 4:49.

[35] *Associated General Contractors* (fn. 11), 459 U.S. 519, 531-533.

[36] *Todorov* (fn. 34), 921 F.2d 1438, 1449 (11th Cir. 1991); *Areeda/Kaplow* (fn. 31), ¶ 144-146.

[37] *Brunswick Corp. v. Pueblo-O-Mat, Inc.*, 429 U.S. 477, 489, 97 S.Ct. 690, 697 (1977).

[38] See further *Areeda/Kaplow* (fn. 31), ¶ 146, p. 67-69.

[39] It is unclear whether antitrust injury is a necessary component of standing or a separate requirement (see *Page*, 37 Stanford L. Rev. 1445, 1483 et seq. (1985); the former interpretation is advocated in *Todorov* (fn. 34), 921 F.2d 1438, 1451 Fn. 20 (11th Cir. 1991) and strongly suggested by *Cargill v Monfort*, 479 U.S. 104, 110 Fn. 5, 107 S.Ct. 484, 489. By contrast, *In re compact disc minimum advertised price* 456 F. Supp. 2d 131, 146 (D.Me. 2006)) conceives antitrust injury as a separate and not indispensable factor for standing. The question seems to be of little practical importance, if any, as antitrust injury and standing, despite the common goal, involve different questions, see *Areeda/Kaplow* (fn. 31), ¶ 146 p. 68; *Page*, 37 Stanford L. Rev. 1445, 1484 (1985).

[40] *Todorov* (fn. 34), 921 F.2d 1438, 1449, 1450, 1452 (11th Cir. 1991); *Page*, 37 Stanford L. Rev. 1445, 1483, 1485 (1985); *Cramer/Simons*, in: Foer/Cuneo, The international handbook on private enforcement of

plaintiff's injury. The Supreme Court has declined to derive a "black-letter rule" dictating the result in every case, but, building on previous case law, has identified relevant factors. In favour of standing, the court listed a causal connection between the antitrust violation and the harm and defendant's intent to cause the harm.[41] The factors militating against standing include:

- The plaintiff being neither a consumer nor a competitor in the market in which trade was restrained,
- indirectness of injury, especially if there are other persons (more) directly affected and better suited to vindicate the public interest in antitrust enforcement,
- tenuous and speculative character of damages asserted and
- potential of duplicative recovery and complex apportionment of damages due to conflicting claims by plaintiffs at different levels of the distribution chain.[42]

b) Assessment of suppliers

Pursuant to the case law sketched above, suppliers have standing if they can prove proximately caused injury-in-fact that can be measured reasonably and constitutes antitrust injury.[43] The Supreme Court's "multiple factor test" does however give the courts wide discretion to evaluate these criteria.[44] As a consequence, no clear, consistent body of case law on supplier standing has evolved. The question is primarily relevant for direct cartel suppliers. As to indirect suppliers, the *Illinois Brick* rule[45] bars claims for damages based on the federal antitrust laws.[46]

As far as can be seen, the discussion centres mostly on employees and suppliers attacking mergers of their customers. While the former group is occasionally treated as a normal issue of supplier standing,[47] it has a weaker case because the Clayton Act requires injury to

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competition law, 2011, p. 83, 90; similarly *Cargill v Monfort*, 479 U.S. 104, 110 n. 5, 107 S.Ct 484, 489 n. 5 ("whether the petitioner was a proper plaintiff under § 4.") and *Crane*, in: Hylton (ed.), Antitrust Law and Economics, 2010, p. 12 et seq.

41 *Associated General Contractors* (fn. 11), 459 U.S. 519, 536 et seq.; *Exhibitors Service, Inc. v. American Multi Cinema, Inc.*, 788 F.2d 574, 578 (9th Cir. 1986). Concerning intent, see however also *Blue Shield of Virginia et al.* (fn. 33), 457 U.S. 465, 479, stating that the "availability of the § 4 remedy (…) is not a question of the specific intent of the conspirators", but then noting that the plaintiff suffered from the "very means by which it is alleged that Blue Shield sought to achieve its illegal ends. The harm to McCready and her class was clearly foreseeable; indeed, it was a necessary step in effecting the ends of the alleged illegal conspiracy."

42 *Associated General Contractors* (fn. 11), 459 U.S. 519, 538-545; *Cargill v Monfort*, 479 U.S. 104, 112 Fn. 6, 107 S.Ct. 484, 490 Fn. 6; *Exhibitors Service, Inc.* (fn. 41), 788 F.2d 574, 578 (9th Cir. 1986); *Serpa Corp. v. McWane*, 199 F.3d 6, 10 (1st Cir. 1999); on this case law *Areeda/Kaplow* (fn. 31), ¶ 145, p. 65 et seq.; 54 Am. Jur. 2d Monopolies and Restraints of Trade (updated Feb. 2013) § 384; *Cramer/Simons*, in: Foer/Cuneo (fn. 40), p. 89.

43 *Areeda/Hovenkamp* (fn. 10), ¶ 350 p. 234.

44 *Jones* (fn. 77), p. 167. The main reason is that the Supreme Court has merely listed the relevant factors without explaining how they are to be weighted or whether some are more important than others.

45 In US federal antitrust law, the passing-on defence is not available and direct purchasers can recover the whole overcharge due to *Hanover Shoe & Co v. United Shoe Machinery Corporation*, 392 US 481 (1968) and *Illinois Brick v. Illinois*, 431 US 720 (1977).

46 Cf. *Zinser v. Continental Grain Co.* 660 F.2d 754, 760 et seq. (1981), cert. denied, 455 U.S. 941 (1982). However a number of states have effectively repealed Illinois Brick under their own antitrust statutes and in principle allow indirectly affected parties to sue, see *Crane*, in: Hylton (fn. 40), p. 13 et seq.; *Hamilton/Henry*, 5 Global Comp Litigation Rev. 111, 114 (2012). In *California v. ARC America*, 490 US 93 (1989), the US Supreme Court held that Section 4 of the Clayton Act does not pre-empt such state laws.

47 See e.g. *Page*, 37 Stanford L. Rev. 1445, 1467 et seq., 1492 et seq. (1985); *Areeda/Hovenkamp* (fn. 10), ¶ 350c p. 236.

"business or property". A loss of employment or reduction in wages is often considered not to be such injury[48] unless the plaintiff's job is itself a commercial venture or enterprise[49] or the conspiracy is directed at the employment market.[50] In this respect employees, though suppliers of labour, are a special case.[51]

With respect to "ordinary" suppliers seeking redress for losses from an antitrust law violation *by*[52] their customers directed at downstream purchasers, most courts as well as leading commentators now deny a right to claim damages, albeit for different reasons:

Some courts deny standing, arguing that the plaintiff and the conspirators must compete in the market in which trade was restrained, otherwise the harm being indirect and derivative[53] and more direct victims the preferred plaintiffs.[54] *Page* concedes that cartel suppliers suffer antitrust injury, since the greater the output restriction, the greater the loss of sales by suppliers.[55] He denies standing, however, arguing that these harms resulted from the violator's attempt to minimize costs and were entirely offset by a cost saving to the defendant. They were thus caused by a neutral aspect of the violation rather than by the welfare loss to consumers, so that allowing them as damages would cause overdeterrence.[56] However, apart from the question how to justify this departure from ordinary law of damages,[57] this reasoning

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[48] E.g. *Reibert v. Atlantic Richfield Co.*, 471 F. 2d 727, 730-732 (10th Cir.) (denying both injury to "business or property" and proximate injury), cert. denied, 411 U.S. 938 (1973); *Areeda/Kaplow* (fn. 31), ¶ 145, p. 63. Nevertheless, standing has occasionally been granted to employees without discussing this aspect, see e.g. *Wilson v. Ringsby Truck Lines, Inc.*, 320 F Supp. 699 (D. Colo 1970) (truck drivers suffering reduced wages and dismissal because of employers alleged horizontal conspiracy); standing denied: *Contreras v. Gower Shipper Veg. Ass'n of Cent. Cal.*, 484 F.2d 1346 (9th Cir. 1973) (employees of alleged price fixers were denied standing obviously because outside target area of the violation), cert. denied, 415 U.S. 932 (1974).

[49] *Reibert* (fn. 48), 471 F. 2d 727, 730. This explains *Vandervelde v. Put & Call Brokers & Dealers Assn.*, 344 F. Supp. 118, 153-154 (S.D.N.Y. 1972) (sole owner whose salary was cash draw that depended on the financial situation of the firm); *Dailey v. Quality School Plan, Inc.*, 380 F.2d 484 (5th Cir 1967) (employee of merger partner who was a salesman with his own territory, employed based on annually renewed contracts and receiving a salary that was on average more than half performance-related); *Roseland v. Phister Mfg. Co*, 125 F. 2d 417 (7th Cir. 1942) (dismissed employee had been general sales agent with performance-related remuneration).

[50] For a comprehensive overview of the respective case law 54 Am. Jur. 2d Monopolies and Restraints of Trade (updated Feb. 2013) § 401.

[51] Cf. the treatment by e.g. *Areeda/Kaplow* (fn. 31), ¶ 145(c), p. 63; 54 Am. Jur. 2d Monopolies and Restraints of Trade (updated Feb. 2013) § 400-403; *Cramer/Simons*, in: Foer/Cuneo (fn. 40), p. 108 et seq.

[52] To be distinguished from suppliers seeking redress for antitrust law violations directed *against* their customers. Such claims are mostly considered too remote from the antitrust violation and therefore not granted standing (see *Volasco Products Co. v. Lloyd A. Fry Roofing Co*. 308 F.2d 383, 392, 395 (6th Cir. 1962); 54 Am. Jur. 2d Monopolies and Restraints of Trade (updated Feb. 2013) § 410) unless the plaintiffs are competitors of the alleged violator (*Amarel v. Connel*, 102 F.3d 1494, 1510 (9th Cir. 1996); *Areeda/Hovenkamp* (fn. 10), ¶ 350d p. 240-242).

[53] *Exhibitors Service, Inc.* (fn. 41), 788 F.2d 574, 579 (9th Cir. 1986).

[54] *Genetic Systems Corp. v. Abbott Laboratories,* 691 F.Supp. 407, 420 et seq. (D.D.C. 1988); *Korshin v. Benedictine Hos.*, 34 F. Supp 2d. 133, 140 (N.D.N.Y. 1999); *SAS of Puerto Rico, inc., v. Puerto Rico Telephone Company*, 48 F.3d 39, 44.

[55] *Page*, 37 Stanford L. Rev. 1445, 1467 et seq., 1493 (1985).

[56] *Page*, 37 Stanford L. Rev. 1445, 1493 (1985).

[57] If a tortfeasor causes damages, these are indemnifiable irrespective of whether they are simple welfare transfers or not. Otherwise, the victim of a theft should not be able to claim damages if the thief's marginal utility of higher wealth is greater than the victim's. The fact that certain consequences of an illegal act are mere welfare transfers seems therefore insufficient to deny a right to damages. Instead, in the US damages are restricted by two other criteria: First, the plaintiff must prove causation in fact, i.e. that his losses did not have occurred but for the defendant's illegal conduct. Second, especially in negligence cases, the defendant's conduct must have been a proximate cause to the plaintiff's harm, i.e. the harm must have been the general kind that was unreasonably risked by the defendant. In this respect, the most general and pervasive approach

is imprecise: In the terminology of part II above, only the direct quantity effect and the price effect are pure welfare transfers from suppliers to cartel members, whereas the cost effect, if negative,[58] may imply welfare losses to society that do not translate into higher prices for cartel customers.

A more convincing variant of the argument denies antitrust injury. *Areeda/Hovenkamp* discuss the example of a merger which prompts the partners to increase prices, to reduce output and correspondingly input demand. They argue that, although suppliers suffer a loss from reduced sales due to the reduction in defendant's output that is the reason for condemning the merger, this effect was "a by-product of the illegal merger rather than the rationale for making it illegal". Such a loss fell short of being antitrust injury, as the injury occurred in another market than the lessening of competition that makes a defendant's conduct illegal.[59] In view of the foregoing, it is sometimes said that competitors and consumers in the relevant market are presumptively the proper plaintiffs to allege antitrust injury.[60]

2. European Union

a) EU-law guidelines

aa) Case law

As noted above, according to the ECJ case law "any individual" must be able to claim compensation for harm causally related to an infringement of EU competition law. This has led to considerable doubts whether traditional restrictions on standing in the laws of the member states are still tenable and spurred several reform initiatives[61] to facilitate actions for damages, which, as a result, are becoming more common in Europe, too.[62]

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holds that a negligent defendant is liable for all the general kinds of harms he foreseeably risked by his negligent conduct and to the class of persons he put at risk by that conduct, see further *Dobbs/Hayden/Bublick,* The Law of Torts, 2nd ed., § 13 (compensation), § 125 (factual and proximate cause), § 186 (but-for test), § 198 (proximate cause). This approach is very similar to English law. English law basically comprises a but-for test of causation and a remoteness test, that asks whether the damages claimed were a foreseeable consequence of the defendant's illegal conduct, which is however not required for deliberate torts, see further *Tettenborn/Wilby*, The law of damages, 2nd ed. 2010, p. 170 et seqq. (remoteness), p. 183 et seqq. (causation).

[58] See fn. 20.

[59] *Areeda/Hovenkamp* (fn. 10), ¶ 350 p. 237 et seq. With respect to an alleged horizontal conspiracy *In re compact disc minimum advertised price* 456 F.Supp. 2d 131, 146 et seq. (D.Me. 2006).

[60] *Serpa Corp.* (fn. 42), 199 F.3d 6, 10 (1st Cir. 1999)

[61] On the latest reform package at European level see *European Commission*, Antitrust: Commission proposes legislation to facilitate damage claims by victims of antitrust violations, IP/13/525; FAQ: Commission proposes legislation to facilitate damage claims by victims of antitrust violations, MEMO/13/531. The package comprises i. a. a *proposal for a directive of the European Parliament and 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 EU*, COM(2013) 404 final. This proposal, besides specifying the acquis communautaire on the scope of damages, shall introduce a form of discovery ("disclosure of evidence"), prescribe the protection of leniency and settlement submissions, require mutual recognition of infringement decisions and harmonize certain aspects (limitation periods, joint and several liability, passing-on defence, availability of consensual dispute resolution, presumption of harm). For a critical review of earlier Commission's initiatives *Kloub*, 5 ECJ 515, especially 516-518, 532-545 (2009). In the UK, the Department of Business, Innovation & Skills (BIS) has just proposed important private enforcement reforms as part of the *Draft Consumer Rights Bill* of June 2013, see further *BIS*, Private Actions in competition law: A consultation on options for reform – government response, January 2013; *Wisking/Dietzel/Herron*, Comp Law Insight 19 March 2013, 3-5. In Germany, the 8th amendment of the German Act against restraints of Competition (GWB), in force since July 30th, 2013, has expanded private enforcement by consumer associations (§ 33 II

Currently, in the absence of community rules governing the matter,[63] such claims are regulated by the member states subject to guiding principles of European law. In particular, according to the ECJ, it is for the domestic legal system of each Member State, subject to the principles of equivalence[64] and effectiveness,[65]

- to designate the courts and tribunals having jurisdiction and to lay down the detailed procedural rules governing actions for safeguarding Community law rights,[66]
- to prescribe the detailed rules governing the exercise of that right, including those on the application of the concept of 'causal relationship',[67]
- to set the criteria for determining the extent of the damages for harm caused by an infringement of European Competition Law,[68] provided that injured persons can seek compensation for actual loss as well as loss of profit plus interest[69]
- and, finally, to prescribe the limitation period for seeking compensation.[70]

In view of this seemingly disparate case law – on the one hand the apodictic demand to enable "any individual" to claim compensation, on the other hand the apparently remarkable leeway for national law – the fundamental question which properties characterize "any person" that must be able to claim damages is not straightforward to answer. The current Commission initiative to foster and harmonize certain aspects of private enforcement in the member states does not address it.[71] The issue is complicated by the fact that a potential claimant's right to sue depends, first, on the (minimum) conditions for liability determined by community law (*existence* of a right to damages), and, second, the *exercise* of that right pursuant to national law subject to the principles of equivalence and effectiveness.[72]

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new version); other important changes to foster private enforcement were implemented with the 7th amendment, see *Wurmnest*, German L.J. 6 1173-1190 (2005). The developments in the EU have also triggered a reform initiative in Swiss, see *Heinemann*, Strukturberichterstattung Nr. 44/4, Evaluation Kartellgesetz, Die privatrechtliche Durchsetzung des Kartellrechts, Bern 2009.

[62] *Romain/Gubbay*, The European Antitrust Review 2011, 47, 49-50; *Rubinfeld*, in: Elhauge (fn. 1), p. 378; *Whish/Bailey* (fn. 2), p. 296 fn. 10.

[63] The Commission is pressing for secondary EU legislation on private enforcement since several years. It is still too early to say whether or to what extent the current proposal (see fn.61) will be successful.

[64] The national rules must not be less favourable than those governing similar domestic actions.

[65] The rules must not render practically impossible or excessively difficult the exercise of rights conferred by Community law.

[66] *Courage* (fn. 5) [2001] ECR I-6297, para 29; Case C-295/04 to C-298/04, *Manfredi*, [2006] ECR I-6619, para 62, 71.

[67] *Manfredi* (fn. 7) [2006] ECR I-6619, para 64.

[68] *Manfredi* (fn. 7) [2006] ECR I-6619, para 92, 98.

[69] *Manfredi* (fn. 7) [2006] ECR I-6619, para 95, 100.

[70] *Manfredi* (fn. 7) [2006] ECR I-6619, para 81.

[71] The draft proposal (see fn. 61) simply states in Art. 2 that "Anyone who has suffered harm caused by an infringement of Union or national competition law shall be able to claim full compensation (…)", without specifying the group of eligible claimants. The draft proposal contains provisions on the passing-on defence only in relation to direct and indirect cartel purchasers (Art. 12 to 15) and suppliers of buying cartels (Art. 14 II). But the Commission explicitly acknowledges in fn. 26 of the *Commission Staff Working Document* accompanying the Communication from the Commission on quantifying harm in actions for damages based on breaches of Article 101 or 102 of the Treaty on the Functioning of the European Union, {C(2013) 3440}, that there are other persons "such as suppliers of the infringers" that "may also be harmed by infringements leading to price overcharges".

[72] *Van Bael/Bellis*, Competition Law of the European Community, 5th ed. 2010, p. 1224;in a similar vein *Howard/Rose/Roth*, in: Bellamy/Child (eds.), European Community Law on Competition,6th. ed. 2007, para 14.111 including fn. 349, pointing to a similar duality with respect to the right to reparation of loss or damage caused to individuals by breaches of Community law attributable to a Member State, i.a. in Case C-46/93, *Brasserie du Pêcheur*, [1996] ECR 1029, paras 37-74, 81-90.

bb) Interpretation

The case law being only fragmentary, the views about its implications differ widely. As a starting point, many authors share the view that the ECJ's demand for "any individual" being able to claim compensation must in principle be taken literally.[73] Therefore, at least some limitations in the laws of the member states are considered incompatible with Community law, in particular those based on the 'protective scope' of Art. 101, 102 TFEU.[74] Moreover, there is much to suggest that Community law does not permit to sweepingly refuse damages to all market participants affected indirectly via pass-on effects.[75] The Commission and some commentators even deduce from the *Manfredi* judgment that indirect purchasers must have standing to sue.[76]

However, only few authors go on to conclude that all individuals harmed directly and indirectly by a competition law infringement actually have a Community law-based right to damages.[77] Others stress that the ECJ has accepted certain limitations.[78] In particular, national courts may deny a party damages to prevent unjust enrichment insofar as an infringement produced gains that offset losses claimed,[79] and/or if that party bears significant responsibility for the distortion of competition.[80] Taking up this case law, the majority of commentators hold the view that EU law allows to restrict the universe of potential claimants for reasons of remoteness,[81] albeit without specifying this rather broad for European law still vague concept.

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[73] *Opinion of Advocate General Jacobs*, Joined Cases C-264/01, C-306/01, C-354/01 and C-355/01, *AOK Bundesverband*, ECR 2004, I-2493, para 104; *Vrcek*, in: Foer/Cuneo (fn. 40), p. 277, 283; *Brealey/Green* (fn. 10), para 2.02; *Alexander*, Schadensersatz und Abschöpfung im Lauterkeits- und Kartelldeliktsrecht, 2010, p. 329, 357 et seq.; Logemann, Der kartellrechtliche Schadensersatz, 2009, p. 107.

[74] *Komninos*, EC Private Antitrust Enforcement, p. 192 f. including fn. 315; *Eilmansberger*, 41 CML Rev 1199, 1226 et seq. (2004); *Eilmansberger*, 44 CML Rev 431, 465 (2007); *Jones/Sufrin*, EC Competition Law, 4th ed. 2011, p. 1204 et seq., 1211; *Säcker/Jaecks*, in: Münchener Kommentar Europäisches und Deutsches Wettbewerbsrecht (Kartellrecht), Vol. 1, 2007, Art. 81 EG para 890; to a large extent also *Görner*, Die Anspruchsberechtigung der Marktbeteiligten nach § 33 GWB, 2007, p. 78-82, 195-203; for an overview of national courts' decisions and reforms abandoning such limitations see *Howard/Rose/Roth*, in: Bellamy/Child (fn. 72), para 14.112.

[75] *Jones* (fn. 77), p. 195; *Bulst*, Bucerius Law Journal 2008, 81, 83; *Vrcek*, in: Foer/Cuneo (fn. 40), p. 277, 283.

[76] White Paper on Damages actions for breach of the EC antitrust rules, COM(2008) 165 final, p. 4, 7 et seq.; *van Bael/Bellis* (fn. 72), p. 1227; *Bulst*, NJW 2004, 2201; *Cengiz*, 59 ICLQ 39, 52 (2010); tentatively *Whish/Bailey* (fn. 2), p. 301. By contrast, *Lübbig*, EuZW 2006, 536, 537 interprets the judgment as implicitly accepting (only) the passing on defense. In any case, it should be noted that the case at hand in *Manfredi* concerned end-consumers in a direct contractual relationship with the cartel members, although the contract was arranged through brokers. Therefore, neither the passing-on defence nor indirect purchaser standing came into play on the merits. This is sometimes overlooked; for instance *Cengiz*, 59 ICLQ 39, 52 (2010) mistakenly writes that the ECJ has faced the question of granting standing to indirect purchasers.

[77] *Komninos* (fn. 74), p. 192 f. including fn. 315; *Jones*, Private Enforcement of Antitrust law, 1999, p. 187 ("It is submitted that, in the EC regime, the principal limitation on who can sue for damages will be the plaintiff's evidence of causation"), 191; *Vrcek*, in: Foer/Cuneo (fn. 40), p. 277, 283.

[78] *Eilmansberger*, 44 CML Rev 431, 461 (2007) conceives these as possible restrictions on standing; *Säcker/Jaecks*, in: Münchener Kommentar Europäisches und Deutsches Wettbewerbsrecht (Kartellrecht), Vol. 1, 2007, Art. 81 EG para 890.

[79] *Manfredi* (fn. 7) [2006] ECR I-6619, para 94 with further references;

[80] *Courage* (fn. 5) [2001] ECR I-6297, para 31; *Ward/Smith*, Competition Litigation in the UK, 2005, paras 7-034 et seqq.

[81] See generally *Opinion of Advocate General Van Gerven*, Case C-128/92, *H. J. Banks & Co. Ltd v British Coal Corporation*, ECR 1994, I-1209, para 52; *Eilmansberger*, 44 CML Rev 431, 468 et seq. (2007); *Howard/Rose/Roth*, in: Bellamy/Child (fn. 72),para 14.113; *Bulst*, Bucerius Law Journal 2008, 81, 83; with respect to standing of indirect purchasers *Commission Staff Working Paper* accompanying the White Paper on Damages actions for breach of the EC antitrust rules, para. 37; *Fort*, in: Mäger, Kartellrecht, 11. Teil, para 44; *Bulst*, Schadensersatzansprüche der Marktgegenseite im EG-Kartellrecht, 2006, p. 248 et seqq.; *Görner* (fn. 74), p. 81 (if the causal relationship between the infringement and damages is merely accidental in

Other causality defences are in dispute, in particular the defence that the anti-competitive behaviour is no *conditio sine qua non* if the injury would have been sustained even in the case of lawful behaviour, and the argument that the victim could have avoided or minimized the damage by taking precautionary action.[82]

The specific question whether or when direct and/or indirect cartel suppliers have an EU law based right to damages is rarely dealt with.[83] In principle, it seems accepted that damage claims may arise if a supplier has to sell his products under less favourable conditions because of a cartel on the demand side,[84] but usually authors do not distinguish buyers' and sellers' cartels. There are two notable exceptions: First, the *Ashurst study* briefly acknowledges damages of suppliers to a sellers' cartel, but points towards complications with respect to their estimation and the restrictive approach in the US.[85] Second, the study for the Commission by *Oxera/Komninos et al.* on quantifying of antitrust damages, starting from the ECJ case law on private damage actions, succinctly lists suppliers as eligible claimants.[86] It can thus be said that, while most commentators overlook damages of suppliers to sellers' cartels, the emerging view seems to be that the concept of "any individual" entitled to damages encompasses suppliers, though proof is considered difficult. This is confirmed by the *Commission Staff Working Document* accompanying the Communication on quantifying harm in actions for damages based on breaches of Article 101 or 102 TFEU[87] mentioning in fn. 26 that other persons "such as suppliers of the infringers (…) may also be harmed by infringements leading to price overcharges". Notwithstanding this, the standards of EU law remain largely open. This uncertainty naturally affects the laws of the member states.

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nature). But see also *Ward/Smith* (fn. 80), para 7-043, who consider the applicability of the remoteness test to be unclear.

82 *Eilmansberger*, 44 CML Rev 431, 468 et seq. (2007) advocates forbidding or severely restricting these defences as they impaired legal certainty and allocative efficiency. With respect to the second defence, his view seems however untenable as the ECJ has held in cases of state liability that "it is a general principle common to the legal systems of the Member States that the injured party must show reasonable diligence in limiting the extent of the loss or damage, or risk having to bear the damage himself", Case C-46/93, *Brasserie du Pêcheur*, [1996] ECR 1029, paras 84 et seq.; joined Cases C-104/89 and C-37/90 *Mulder and Others* v *Council and Commission* [1992] ECR I-3061, para 33. As general principles common to the legal systems of the Member States are a major source of community law, there is no reason to think that this holding does not apply to damages for violations of EU competition law, too. Against this background, *Ward/Smith* (fn. 80), para 7-073 rightly consider the mitigation principle applicable in competition law damages claims.

83 *Eilmansberger*, 44 CML Rev 431, 461 (2007) and *Säcker/Jaecks*, in: Münchener Kommentar Europäisches und Deutsches Wettbewerbsrecht (Kartellrecht), Vol. 1, 2007, Art. 81 EG para 891 exclude suppliers of direct cartel victims for reasons of remoteness. Damages of victims' suppliers are however arguably more remote than damages of (direct) cartel suppliers.

84 *Vrcek*, in: Foer/Cuneo (fn. 40), p. 277, 283; *Meessen*, Der Anspruch auf Schadensersatz bei Verstößen gegen EU-Kartellrecht, 2011, p. 219.

85 *Clark/Hughes/Wirth*, Analysis of Economic Models for the calculation of damages, in: Study on the conditions of claims for damages in case of infringement of EC competition rules (*Ashurst study*), p. 15 para. 2.15 et seq., including n. 20.

86 *Oxera/Komninos et al.*, Quantifying antitrust damages - Towards non-binding guidance for courts, December 2009, 2010, http://ec.europa.eu/competition/antitrust/actionsdamages/, p. 27 (with respect to a price cartel); see also p. 24 (with respect to exclusionary conduct).

87 See fn. 71 above.

b) An exemplary look at two member states

aa) England

In English law, the claimant's cause of action for damages for infringement of EU competition law is now[88] generally considered to be the tort of breach of statutory duty.[89] As claims for damages are usually settled, sometimes with considerable payments,[90] there are no final judgments yet that have awarded damages to cartel victims *and* been upheld on appeal.[91] Recently, the CAT has awarded damages to the victim of an abuse of a dominant position.[92] In view of the small body of authoritative case law, it is an open question whether cartel suppliers are entitled to damages.[93] Two conditions are of critical importance:[94]

First, it is not sufficient for the claimant to show that the defendant's breach was a *causa sine qua non*, i.e. that the loss would not have occurred but for the breach. Rather, the tortious conduct must have been a cause that, from a normative point of view, is considered material enough to justify damages. This requires that

- the breach was a substantial, direct or effective cause that cannot be ignored for the purpose of legal liability,[95]
- the loss was not caused by the claimants own mismanagement or another intervening cause,[96] which will probably require a supplier to show that the cartel members did not cut supplies from him for other commercial reasons (such as quality), and that
- the injury is sufficiently proximate.[97]

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88 The question was unclear for a long period of time; apart from breach of statutory duty, other torts were discussed, such as unlawful interference with trade, or a new tort to reflect the EU nature of the claim, see *Jones/Sufrin* (fn. 74), p. 1214.

89 *Garden Cottage Foods Ltd v Milk Marketing Board* [1984] AC 130, 141; *Devenish Nutritition Ltd. v. Sanofi-Aventis SA (France)* [2007] EWHC 2394 (Ch), para 18, *per* Lewison J.; *Lesley Farrell/Neil Davies*, The European Antitrust Review 2010, p. 246-253; *Brealey/Green* (fn. 10), para 16.02, 17.02; *Clough/ McDougall*, United Kingdom report, in: *Ashurst Study* (fn. 85), p. 3; sceptical *Whish/Bailey* (fn. 2), p. 309, pointing to the *effet utile* of Community law. Resorting to the tort of breach of statutory duty is the general approach in English law with respect to EU-law rights which must be given effect without further enactment, see *Sempra Metals Ltd (formerly Metallgesellschaft Ltd) v Inland Revenue Commissioners* [2008] 1 A.C. 561, para 69, *per* Lord Nicholls of Birkenhead.

90 See the studies of *Rodger,* 29 E.C.L.R. 96-116 (2008), *Rodger*, 27 E.C.L.R. 341, 346 (2006), and besides the references provided by *Whish/Bailey* (fn. 2), p. 315 et seq., fn. 185.

91 *Brealey/Green* (fn. 10), para 16.36; *Whish/Bailey* (fn. 2), p. 316.

92 *2 Travel Group PLC (in liquidation) v Cardiff City Transport Services Limited*, [2012] CAT 19.

93 For a short general list of the elements a claimant must show when making a claim for damages based on breach of statutory duty see *Jones/Sufrin* (fn. 74), p. 1214.

94 See *Brealey/Green* (fn. 10), para 17.03 et seqq.

95 *Bailey v Ministry of Defence* [2008] EWCA Civ. 883, [2009] 1 WLR 1052, 1066-69; *Stanley v Gypsum Mines Ltd.* [1953] AC 663, 687, *per* Lord Asquith; *Brealey/Green* (fn. 10), para 17.03. This is important if several necessary factors contributed to the loss (see generally McGregor on Damages, 18th ed. 2009, para 6-016 et seqq.). It is still an open question whether the courts will then take a broad 'but for' approach to causation, rigorously apply the requirement that the competition law violation must be the substantial, direct or effective cause of the loss claimed, or whether the courts will predicate this on the infringement in question. If a court finds that some of the defendant's conduct that led to the claimant's loss infringed competition law, while other of the conduct was legitimate, the court could also apportion loss on an approximate basis to the different effective causes, see further *Brealey/Green* (fn. 10), paras 17.03, 17.06.

96 Cf. *Arkin v Borchard*, [2003] EWHC 687 (Comm), [2003] Lloyd's Rep 225, paras 538-555 (claimant's own mismanagement as intervening cause), para 568 (infringement not predominant cause); *Crehan v Inntrepreneur Pub Company (CPC)*, [2003] EWHC 1510 (Ch), paras 240-248 (no mismanagement); *Brealey/Green* (fn. 10), para 17.04.

97 *Brealey/Green* (fn. 10), para 17.05.

Second, and probably the crucial hurdle for cartel suppliers, a claimant who sues for breach of statutory duty must in principle show that the duty was owed to him, meaning (1) that the statute imposes a duty for the benefit of the individual harmed, and that (2) the duty was in respect of the kind of loss suffered.[98] In *Crehan v Inntrepreneur Pub Company*, the defendant raised this issue as a defence before the Court of Appeal, referring – apart from English authorities – to the doctrine of antitrust injury as stated by the Supreme Court in *Brunswick*.[99] The defendant argued that the claimant need not only prove a causal link between the illegal distortion of competition at hand and the loss, but also that the loss was of a type Art. 101(1) intended to prevent. The defendant disputed this because *Crehan* had not suffered from restricted competition in the market for the supply of beer to on-trade outlets, which made the tying arrangement at issue violate Art. 101 TFEU, but from the beer tie distorting competition with other pubs free of tie. The Court of Appeal accepted "as a matter of English law" that the duty breached must be in respect of the kind of loss suffered.[100] However, English law must be interpreted such that liability is imposed where required by EU law.[101] The Court of Appeal therefore rejected the argument in the case at hand, inferring from the ECJ's preliminary ruling that Community law conferred onto *Crehan* a right to the type of damages claimed.[102]

The case law leaves thus open whether the English law principle can ever apply in the context of European competition law.[103] In any case, the principle cannot be applied narrowly: In particular, the ECJ judgment in *Courage* shows that the loss need not occur in the same market than the illegal restriction of competition. Some commentators conclude that the requirement that the statute imposes a duty for the benefit of the individual harmed is always satisfied in cases involving Art. 101 and 102 TFEU.[104] Building on this view, others argue that cartel suppliers are entitled to damages pursuant to English law.[105] This arguably pertains to indirect suppliers, too. While the question whether the passing-on defence is available in English lawhas been not been decided by the courts yet,[106] the emerging position is to accept it,[107] which should imply, that, conversely, indirect victims are in principle entitled to claim damages[108] if they meet the standard of proof.[109]

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[98] *SAAMCO v York Montague Ltd* [1997] AC 191, 211 et seq., *per* Lord Hoffmann; *Gorris v Scott* (1874) LR 9 Ex 125; with respect to competition law actions for damages *Brealey/Green* (fn. 10), para 17.08; *Jones/Sufrin* (fn. 74), p. 1214.

[99] *Crehan v Inntrepreneur Pub Company (CPC)* [2004] EWCA Civ 637, para 156 et seq.

[100] *Crehan* (fn. 99) [2004] EWCA Civ 637, para 158.

[101] *Jones/Sufrin* (fn. 74), 1214.

[102] *Crehan* (fn. 99) [2004] EWCA Civ 637, para 167.

[103] *Brealey/Green* (fn. 10), para 17.10; *Jones/Sufrin* (fn. 74), p. 1218.

[104] *Jones/Sufrin* (fn. 74), p. 1215; in a similar vein *Ward/Smith* (fn. 80), para 7-017.

[105] See e.g. *Smith/Maton/Campbell*, in: Foer/Cuneo (fn. 40), p. 296, 300.

[106] For comprehensive discussions see *Brealey/Green* (fn. 10), paras 16.13-16.32, with short summaries of the legal situations in the US and some EU member states; *Ward/Smith* (fn. 80), paras 7-044 et seqq.

[107] In *Emerald Supplies Ltd v British Airways plc* [2009] EWHC 741, [2010] Ch 48, para 37 the Chancellor remarked obiter that the judgment in *Hanover Shoe* was "a policy decision not open to the courts in England", damage being a necessary ingredient on the cause of action; furthermore, Longmore LJ in *Devenish Nutrition Ltd. V Sanofi-Acventis SA (France)* [2008] EWCA 1086, [2009] Ch 390, para 147, followed by Tuckey, LJ, para 158, strongly disfavoured allowing victims to claim damages that they have passed on, which would mean "transferring monetary gains from one underserving recipient to another undeserving recipient (…)"; in the same vein *Whish/Bailey* (fn. 2), p. 310 et seq.

[108] *Clough/ McDougall*, United Kingdom report, in: *Ashurst Study* (fn. 85), p. 24 et seq. The issue might be decided soon, see *Whish/Bailey* (fn. 2), p. 311.

bb) Germany

In Germany, the prospects of suppliers to claim lost profits changed considerably with the 7th amendment of the German Act against Restraints of Competition (Gesetz gegen Wettbewerbsbeschränkungen, GWB) in 2005: Before the 7th amendment, many lower courts held that the then-applicable version of the cartel prohibition protected and therefore entitled to damages only those directly aimed at by a competition law infringement (doctrine of the protective purpose, *Schutznormtheorie*),[110] thereby excluding suppliers of a sellers' cartel. However, the interpretation, that has only recently been overruled by the German Federal Court (Bundesgerichtshof, BGH) on the occasion of a case predating the 7th amendment,[111] was hardly compatible with the ECJ case law since *Courage*. This prompted the legislator to reform the relevant provision in the GWB.[112]

Since the reform, the GWB stipulates a right to damages for every person affected, defined as everybody who, as a competitor or other market participant, is adversely affected by the infringement.[113] Insofar the legislator abandoned the doctrine of the protective purpose.[114] "Other market participants" are understood broadly. The term comprises all natural persons and legal entities that are potentially adversely affected in their market behaviour[115] by a competition law infringement.[116] The legislator explicitly intended suppliers to belong to these 'other market participants', regardless of whether the cartel deliberately aimed at them.[117] This seems widely accepted[118] and includes direct and – subject to remoteness – indirect suppliers. After much controversy concerning the passing-on defense,[119] the German

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[109] The claimant must prove its allegations on the balance of probabilities, whereat, the more unlikely the alleged infringement, the stronger the evidence must be to establish it. Furthermore, the claimant must demonstrate that the anti-competitive behaviour caused the loss suffered, which does not require the same high evidentiary standard than the proof of the infringement, see further *Brealey/Green* (fn. 10), para 16.03-16.12; briefly *Whish/Bailey* (fn. 2), p. 309-311.

[110] See further *Bornkamm*, in: Langen/Bunte, Kommentar zum Deutschen und Europäischen Kartellrecht, Vol. 1, 11th ed. 2011, § 33 paras 18, 25-28; *Bulst*, NJW 2004, 2201, 2201 et seq., both pointing out that this view was not predetermined by the case law of the German Federal Court (Bundesgerichtshof, BGH) at that time, which had merely held that "at least" the persons directly aimed at by the infringement had a right to damages; *Alexander* (fn. 73), p. 370; Bechtold, GWB, 6th ed. 2010, § 33 para 9; critical *Hempel*, Privater Rechtsschutz im Kartellrecht, p. 42 et seqq.

[111] *BGH*, case KZR 75/10, Selbstdurchschreibepapier ("ORWI"), NJW 2012, 928, 929, paras 16 et seq.

[112] See government justification for the 7th amendment of the German Act against restraints of competition, Bundestag document No. 15-3640, p. 35, 53; *Bornkamm*, in: Langen/Bunte (fn. 110), § 33 GWB paras 17-20.

[113] Section 33 subsection 3 sentence 1 in conjunction with subsection 1 sentence 3 GWB.

[114] *Hempel*, WuW 2004, 362, 368; *Bornkamm*, in: Langen/Bunte (fn. 110), § 33 GWB paras 16, 20.

[115] This excludes claims by employees as well as shareholders only because the cartel members are fined for the infringement. Both groups are then affected by the deterioration of the company's financial statuts, not by effects on their market behaviour, *Görner* (fn. 74), p. 164.

[116] *Staebe*, in: Schulte/Just, Kartellrecht, 2012, § 33 GWB para 9, 28; *Bechtold*, GWB, 6th ed. 2010, § 33 para 10; *Emmerich*, in: Immenga/Mestmäcker (fn. 10), § 33 para 27; *Emmerich*, Kartellrecht, 12th. ed. 2012, § 8 para 16; in principle also *Fort* (fn. 81), para 44; for an overview about current scholarly opinions and an in depth analysis *Meessen* (fn. 84), p. 172-189.

[117] See the government justification for the 7th amendment of the German Act against restraints of competition, Bundestag document No. 15-3640, p. 35, 53; on the justification see *Meessen* (fn. 84), p. 169, 181; *Zimmer/Höft*, ZGR 5/2009, 662, 683;

[118] See for instance explicitly including cartel suppliers *Emmerich*, in: Immenga/Mestmäcker (fn. 10), § 33 paras 22, 28; *Emmerich* (fn. 116), § 8 para 16, § 40 para 8; *Bornkamm*, in: Langen/Bunte (fn. 110), § 33 GWB § 33 GWB paras 20, 36.

[119] While some scholars argued that all affected market participants are entitled to damages (for instance *Emmerich*, in: Immenga/Mestmäcker (fn. 10), § 33 para 29; *Emmerich* (fn. 116), § 40 para 20 et seq.; *Zimmer/Höft*, ZGR 5/2009, 662, 683 et seq. fn. 109; *Bornkamm*, in: Langen/Bunte (fn. 110), § 33 GWB paras 101 in conjunction with 37, 42-44), others were of the view that only those in direct contact with the cartel

Federal Court (*Bundesgerichtshof*, BGH) endorsed it in 2012, holding that the group of potential claimants is restricted only by the requirement of a causal link between the illegal cartel and the damages claimed.[120]

There are thus good reasons to conclude that lost profits of suppliers resulting from an output reduction by the cartel members are in principle recoverable as damages pursuant to German law.[121] It should however be noted that some legal uncertainty remains. In particular, according to a view that relies on the government justification for the reform act, a market participant is only entitled to damages if there is a more than accidental link, an inner coherence between the reasons that make the defendants conduct a competition law violation and the adverse effect on the market participant (so called *Zurechnungs- oder Rechtswidrigkeitszusammenhang*).[122] This might be used to exclude cartel suppliers.[123]

Besides, there are doubts whether claims by suppliers are enforceable in practice. Sometimes they are deemed to be speculative in nature and very unlikely to be proven.[124] In particular, similar to England, the defendant's action need not only be a *conditio sine qua non* for the loss (*äquivalente Kausalität*), but damages must also be attributable to the defendant from a normative point of view (*adäquate Kausalität*). Besides, a competition law infringement is not considered causal for damages that would have occurred but for the infringement, too.[125] The supplier must therefore show that the cartel member(s) had bought more inputs just from him (i.e. not from a competing supplier). This task is however alleviated by the legal presumption of lost profits in sec. 252 of the German Civil Code (BGB)[126] if the supplier could reasonably expect to sell a certain quantity to the cartel members,[127] e. g. because of a stable customer-client relationship.

IV. The case for and against cartel supplier standing in the EU

1. Lessons from the US?

In view of, on the one hand, the open questions concerning the scope of the right to damages for infringements of EU competition law, and, on the other hand, the considerable experience gained with intense private enforcement in the US, it suggests itself to ask whether the US approach to supplier standing could – in whole or in part – be a model for private enforcement

members could claim damages (e.g. *Bechtold*, GWB, 6th ed. 2010, § 33 para 11, 20; *Koch*, WuW 2005, 1210, 1217-1222).

[120] *BGH*, case KZR 75/10, Selbstdurchschreibepapier ("ORWI"), NJW 2012, 928, 929 et seqq., 931 para 35; *Staebe* (fn. 116), para 28.

[121] *Logemann* (fn. 73), p. 239.

[122] *Bornkamm*, in: Langen/Bunte (fn. 110), § 33 GWB paras 22 et seq.; *Meessen* (fn. 84), p. 185-189; generally *Grüneberg*, in : Palandt, Bürgerliches Gesetzbuch, 72nd. ed. 2013, Vorb § 249 paras 29 et seqq.

[123] For instance *Meessen* (fn. 84), p. 189 argues that market participants entitled to damages pursuant to German law are only those whose freedom of action and choice is restricted. This may or may not be true for suppliers to a price cartel, depending on how important the cartel members are as customers.

[124] *Logemann* (fn. 73), p. 239.

[125] *Bechtold*, GWB, 6. Aufl. 2010, § 33 Rn. 27

[126] Sec. 252 BGB sentence 1 stipulates that the damage to be compensated for also comprises the lost profits. Sentence 2 adds that those profits are considered lost that in the normal course of events or in the special circumstances, particularly due to the measures and precautions taken, could probably be expected.

[127] This might be the case for instance because the supplier produced inputs specifically designed for the needs of the cartel firms.

in the EU. This crucially depends on the comparability of the framework conditions in the respective legal systems.[128]

Standing limitations in the US are to a large extent explained by the draconian treble damages remedy. Combined with opt-out class-actions, pre-trial discovery and contingency fees, it makes claims for damages very attractive for purported victims, implying a high risk of duplicative recovery and complex apportionment.[129] In the US, it is therefore essential to tightly limit the universe of potential plaintiffs. If, as a collateral consequence, some damages are not recoverable, automatic trebling can in principle make up for such a slippage.[130] Tellingly, when treble-damages are no concern, the US courts adopt a more liberal approach to standing. This holds in particular for sec. 16 of the Clayton Act (15 U.S.C. 26)[131] which provides for injunctive relief against threatened loss or damage when and under the same conditions and principles as injunctive relief is granted by courts of equity. In this setting, the courts are less concerned about whether the plaintiff is an efficient enforcer of the antitrust laws because the dangers of mismanaging them are less pervasive,[132] the risk of duplicative recovery or the danger of complex apportionment that pervade the analysis of standing under sec. 4 Clayton Act being irrelevant.[133]

In a similar vein, even if to a somewhat lesser extent, the risks of duplicative recovery and complex apportionment are less important in the EU compared to the US, because the EU member states do only exceptionally provide for treble damages[134] and, while providing for certain collective action mechanisms, reject opt-out class actions.[135] Moreover, a loser-pays

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[128] Cf. *Brealey/Green* (fn. 10), para 16.17 fn. 26.

[129] *Cargill v Monfort*, 479 U.S. 104, 111, 107 S.Ct. 484, 490; *Blue Shield of Virginia et al.* (fn. 33), 457 U.S. 474-475.

[130] *Crane*, in: Hylton (fn. 40), p. 13.

[131] See *Altman/Pollack*, in: Callmann on Unfair Competition, Trademarks and Monopolies, 4th ed., Database updated December 2012, § 4:49; 54 Am. Jur. 2d Monopolies and Restraints of Trade (updated Feb. 2013) § 382; *Cramer/Simons*, in: Foer/Cuneo (fn. 40), p. 87.

[132] *Todorov* (fn. 34), 921 F.2d 1438, 1452 (11th Cir. 1991).

[133] *Cargill v Monfort*, 479 U.S. 104, 111, 107 S.Ct. 484, 490; *Todorov* (fn. 34), 921 F.2d 1438, 1452 (11th Cir. 1991). While the standing is therefore less restrictive for a plaintiff seeking an injunction under section 16 of the Clayton Act, the plaintiff must allege threatened injury that would constitute antitrust injury in the same way as in a claim for damages. This is to prevent contradicting results, because, as the Supreme Court put it, "would be anomalous (...) to read the Clayton Act to authorize a private plaintiff to secure an injunction against a threatened injury for which he would not be entitled to compensation if the injury actually occurred.", *Cargill v Monfort*, 479 U.S. 104, 112, 107 S.Ct. 484, 490.

[134] Exemplary damages for competition law violations in England are not awarded regularly but rather exceptionally, see *2 Travel Group PLC (in liquidation)*(fn. 92), paras 448 et seq.

[135] The non-binding *Commission Recommendation* on common principles for injunctive and compensatory collective redress mechanisms in the Member States concerning violations of rights granted under Union Law, C(2013) 3539/3, a part of the recent reform package (see above note 61), explicitly rejects US-style class actions (cf. recital 15 and *Commission recommends Member States to have collective redress mechanisms in place to ensure effective access to justice*, IP/13/524, p. 3). While many EU member states provide for some form of opt-in group claim (see with respect to German, English and Dutch law *Maton et al.*, 2 J of Eur Comp L & Practice, 489 (2011); for a very concise and rather rough overview about all member states *Buccirossi/Carpagnano et al.*, Collective Redress in Antitrust, Study for the Policy Department A: Economic and Scientific Policy, 2012, p. 19 et seqq.), currently no member state provides for opt-out class actions for damages with respect to competition law infringements. In the UK, the *BIS* however wants to introduce collective proceedings before the Competition Appeal Tribunal (CAT) as part of the Draft Consumer Rights Bill (fn. 61). The CAT would authorize such actions as opt-in or opt-out proceedings (sec. 47B (7)(c) Draft Consumer Rights Bill). It remains to be seen whether this part of the Bill will be enacted in the end. In any case, opt-out collective actions would include only class members domiciled in the UK (cf. sec. 47B (11) (b)); in all collective actions, an award of exemplary damages would be excluded (sec. 47C(1)), damages based agreements (contingency fees) prohibited (sec. 47C(7)), the loser pays rule would apply and a

rule applies to the costs of trial. In such an institutional framework, only those who suffered significant and provable losses have an incentive to sue for damages. Therefore, in the EU, compared to the US, more persons that might suffer losses from a cartel can confidently be granted a right to damages. In certain respects, this is already current case law. In particular, as *Crehan* shows, in the EU, unlike in the US, a right to damages does not require the loss to occur in the same market than the lessening of competition that makes the defendant's conduct illegal. It follows that the type of loss which the competition provisions are intended to prevent is broader in the EU than in the US.

2. The purpose of a right to damages as the guiding principle for standing

The insight that the EU framework allows for more generous standing leads to the question how the scope of the right to claim damages should be delimited in the EU. The key to the answer, in our opinion, is the purpose the legal system assigns to that right. In the US, a major purpose of private actions for damages is to deter antitrust law violations:[136] Private plaintiffs are enlisted as "private attorney generals"[137] to complement the resources of the antitrust authorities. Such a utilitarian perspective justifies restricting standing to those who can efficiently enforce the antitrust laws, even if this means that some victims remain uncompensated, while others receive windfall profits.[138] The same result is hard to justify in a legal system like the EU where damages fulfil at least equally a compensatory purpose.[139] In view of this goal, awards should mirror the claimant's losses as closely as possible, whereas inaccuracy can create injustice.[140]

3. The case for supplier standing in the EU

On the basis of the guiding principle just proposed, there is much to suggest that damages of direct cartel suppliers should be recoverable pursuant to EU-law.

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damage award, insofar as it is not claimed by the class members, would have to paid to the charity (sec. 47C(5)). The proposal thus differs considerably from the US class action system.

[136] *Rubinfeld*, in: Elhauge (fn. 1), p. 378; *Crane*, in: Hylton (fn. 40), p. 1; *Huffman*, 60 SMU Law Review 103, 113 (2007).

[137] Cf. *Associated General Contractors* (fn. 11), 459 U.S. 519, 542; *Exhibitors Service, Inc.* (fn. 41), 788 F.2d 574, 581 (9th Cir. 1986); *Cuneo*, in: Foer/Cuneo (fn. 40), p. 27.

[138] Even if the injury of one potential claimant is truly "inextricably intertwined" with injury of another, the Supreme Court may decide that either of them, but not both may recover, to avoid the risk of duplicative recovery and the practical problems inherent in distinguishing the losses suffered, see *Illinois Brick Co. v. Illinois* 431 U.S. 720, 97 S.Ct. 2061 (1977); *Blue Shield of Virginia et al.* (fn. 33), 457 U.S. 465, 492 (Justice Rehnquist, with whom The chief Justice and Justice O'Connor join, dissenting).

[139] The ECJ lists the preventive and the compensatory purpose of damages without suggesting a hierarchy, see case C-536/11, *Bundeswettbewerbsbehörde v Donau Chemie*, paras 23 et seq.; less pronounced case C-295/04 to C-298/04, *Manfredi*, [2006] ECR I-6619, para 89, 91, 94. Many commentators and member states courts, including the Commission, do however consider compensation to be the primary purpose, see the draft proposal for a damages directive, COM(2013) 404 final (fn. 61), p. 13 and Art. 2; *Almunia*, Public enforcement and private damages actions in antitrust, SPEECH/11/598, European Parliament, ECON Committee, Brussels, 22 September 2011, p. 2-3; *Nebbia*, E.L. Rev. 2008, 33(1), 23-43; *Komninos*, Comp Law Rev. 3 (Dec. 2006) 5, 9, 10; *Jones*, World Comp 27(1) (2004), 13-24; *Whish/Bailey* (fn. 2), p. 297; *BGH*, case KZR 75/10, Selbstdurchschreibepapier ("ORWI"), NJW 2012, 928, 931, paras 36-38, p. 933 para. 62. Notably, this does not exclude to acknowledge and strengthen that private actions for damages also contribute to preventing infringements, see *Komninos*, Comp Law Rev. 3 (Dec. 2006) 5, 9 et seq.; *Wagner*, German Working Papers in Law and Economics, Vol. 2007, Paper 18, p. 3-10; *Zimmer/Höft*, ZGR 2009, 662, 688; BGH, case KZR 75/10, Selbstdurchschreibepapier ("ORWI"), loc. cit.

[140] *Wils*, World Comp 26(3) (2003), 473, 479.

First, as shown above, suppliers regularly suffer losses from a cartel, and thereby come within the scope of "any individual" in the words of the ECJ.
Second, full compensation as an at least equal purpose of competition law actions for damages[141] requires covering all losses accurately and precisely, as long as no exception is justified. Four justifications seem particularly relevant: (1) remoteness – if damages are remote, litigation is costly and prone to errors that impair prevention (deterrence);[142] (2) unjust enrichment – in this case the plaintiff would receive a windfall undefendable from a corrective justice point of view;[143] (3) the victim itself bears significant responsibility for the infringement – then allowing for damages would create an ex-ante incentive to contravene the law; (4) the victim could have easily and cheaply avoided the damage – then allowing for compensation would encourage socially inefficient behaviour.[144] Neither of these justifications invariably applies to damages (at least) of direct cartel suppliers. It would therefore seem arbitrary to outrightly exclude this group from a right to damages, conflicting with the general principle of equal treatment that requires that comparable situations not be treated differently and different situations not be treated alike unless it is objectively justified,[145] now enshrined as a fundamental right in Art. 20 GRCh.[146]
Third, recognizing suppliers as eligible claimants suits well with the ECJ case law that, notwithstanding the compensatory purpose, assigns the community law right to damages a preventive purpose, too.[147] Advocate General *van Gerven* even posits that Community law requires the civil law consequences themselves, in particular the right to damages of any individual, to have a deterrent effect (instead of only contributing to discourage infringements).[148] Given that not all infringements are detected and that not all victims of detected infringements sue, single damages will arguably only make a significant contribution to preventing infringements and thereby have a deterrent effect if the class of eligible claimants is not defined narrowly. This suggests that direct and indirect cartel suppliers should in principle have a right to damages.[149] Such a broad definition of potential claimants would also fit well with the ECJ case law in other fields. In particular, the ECJ has enlisted EU citizens as supervisors over the decentralized enforcement of EU law by granting citizens

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[141] See references in fn. 139.
[142] This holds for type I and type II errors, see *Schinkel/Tuinstra*, Int. J. Ind. Organ. 2006, 1267, 1287 et seq.
[143] See *Wils*, World Comp 26(3) (2003), 473, 487.
[144] See on the established principle to assign liability to the so called least-cost avoider (also cheapest cost avoider) *Calabresi*, The costs of accidents (1970), p. 135 et seqq.; *Schäfer/Müller-Langer*, in: *Faure*, Tort Law and Economics, 2009, p. 16 et seq.; *Ben-Shahar*, in: Bouckaert/De Geest (eds.), Encyclopedia of Law and Economics, Vol II. Civil Law and Economics, 2000, p. 644, 645 et seq.; *Shavell*, Foundations of Economic Analysis of Law, p. 189 et seq.; *Landes/Posner*, 12 Journal of Legal Studies, 109, 110 (1983);
[145] Case C-292/97, *Kjell Karlsson et al.*, [2000] ECR I-2737, para 39; Case T-347/94, *Mayr-Melnhof Kartongesellschaft v Commission*, [1998] ECR II-1751, para 352; case T-13/03, *Nintendo v Commission*, [2009] ECR II-947, paras 95, 170.
[146] See the explanations relating to the Charter of Fundamental Rights (ChFR), OJ No C 303, 14.12.2007, p. 17, 24. The explanations drawn up as a way of providing guidance in the interpretation of this Charter and shall be given due regard by the courts of the Union and of the Member States, Art. 52 paragraph 7 ChFR.
[147] *Courage* (fn. 5) [2001] ECR I-6297, para 27; *Manfredi* (fn. 7) [2006] ECR I-6619, para 91.
[148] *Opinion of Advocate General Van Gerven*, Case C-128/92, *H. J. Banks & Co. Ltd v British Coal Corporation*, ECR 1994, I-1209, para 54; disagreeing *Säcker/Jaecks*, in: Münchener Kommentar Europäisches und Deutsches Wettbewerbsrecht (Kartellrecht), Vol. 1, 2007, Art. 81 EG para 842.
[149] This holds in particular as long the member states, is it is currently the case, do not combine exemplary or punitive damages and group claims as regular instruments.

generous standards for standing to sue the member states for benefits that flow from EU-law.[150]

4. Objections

While there are good arguments for granting suppliers of price cartels an EU law based right to damages, there are also some important counterarguments. Not all of these, however, are convincing.

a) Supplier damages reflective?

First, suppliers' damages from a sellers' cartel could at first blush considered to be reflective, in the sense of merely mirroring the competition law infringement in relation to cartel customers:[151] customers pay higher prices and therefore buy less, the quantity reduction affecting the whole production chain. This view is however too simplistic, as a closer look from a law and economics perspective reveals,:

Suppliers primarily suffer a negative direct quantity effect. This effect will usually not translate into customer damage claims, because those customers priced out of the market (potential customers) are often not able to show and prove damages: End-consumers who did not buy (or bought less) do not even suffer damages in the legal sense, as the law acknowledges only monetary losses or lost profits, not losses of utility. At best, cartel customers at intermediate layers of the production chain could claim lost profits if they overcome difficulties of proof.[152] But when calculating the lost profits of such claimants, their foregone earnings must be reduced by their hypothetical input costs that comprise all profit margins (hypothetically) charged by upstream firms. As a consequence, even if cartel customers claim lost profits with respect to units not bought, their damages do not include the direct quantity effect suffered by suppliers.

Cartel customers primarily claim the overcharge, i.e. the price increase for the units actually produced and sold. As shown above, with respect to these units cartel suppliers may face a positive or a negative price effect. (Only) a negative effect ("undercharge") contributes to suppliers' damages. By contrast, such an effect does not add to consumer damages: Either the cartel passes on the lower input costs, which then reduce the overcharge and thereby consumer damages, or the cartel retains the decrease in input costs to achieve a higher margin, which again does not increase consumer damages, because the overcharge is calculated with reference to the input price under competition. On the other hand, while the negative price effect for suppliers fits easily within the basic legal definition of damages – suppliers face losses that would not have occurred but for the cartel, which is a proximate cause (condition sine qua non) – the negative price effect mitigates the cartel's overall negative welfare

[150] Case 26/62, *van Gend & Loos* [1963] ECR 1, 13: "The vigilance of individuals concerned to protect their rights amounts to an effective supervision in addition to the supervision entrusted by Articles 169 and 170 to the diligence of the Commission and of the Member States." see further *v. Danwitz*, Europäisches Verwaltungsrecht, 2008, p. 283–285; *Craig*, EU law, 5th ed. 2011, p. 183 et seqq., 215.

[151] If a certain head of damage can occur only once and can therefore be attributed only alternatively or in part, but not cumulatively, to the different levels of the production chain, it can be claimed only by one level of the production chain, while others claims are excluded, cf. *BGH*, case KZR 75/10, Selbstdurchschreibepapier ("ORWI"), NJW 2012, 928, 933, paras 60,

[152] Potential purchasers have to prove that they had bought (more) from the cartel members, which will often be very difficult and is even deemed highly speculative, see *Wils*, 26 World Comp 473, 487 (2003); *Crane*, in: Hylton (fn. 40), p. 1, 15. A successful claim might be possible if the affected buyer was in a stable customer-client relationship with the cartel members.

effects.[153] From a law and economics perspective, one might therefore advocate accepting only the direct quantity effect, not the price effect, as a component of suppliers' damages.[154] However, there are at least two important counter-arguments: First, in view of the fact that cartels cause ripples of harm to flow through the economy, it is not to be expected that all those who suffer from welfare losses actually claim damages. It would therefore not appear convincing to restrict the legal notion of damages for those that are sufficiently proximate to the cartel and thereby good positioned to make a claim for efficiency reasons. Second, sticking to the traditional legal notion of damages would increase legal certainty for supplier claims and fit well with the ECJ case law that attaches also a preventive purpose to competition law actions for damages.

b) The goal of competition law: Consumer welfare vs. supplier losses?

The argument of supplier damages being merely reflective could at most have some force from a normative perspective if one considers consumer welfare to be the primary goal of European community competition law and – based on this – losses to upper levels of the production chain to be immaterial. However, such a view seems hardly tenable since the EJC has held in *GlaxoSmithKline* that Article 101 TFEU aims to protect not only the interests of competitors or of consumers, but also the structure of the market and, in so doing, competition as such.[155] Therefore, according to the ECJ, for a finding that an agreement has an anti-competitive object, it is not necessary that final consumers be deprived of the advantages of effective competition in terms of supply or price.[156] Against this background, it cannot be argued that damages to upper levels of the production chain do not matter. Actually, in certain scenarios such as the one in GlaxoSmithKline, awarding non-consumers a right to damages may even be crucial for having private enforcement at all.

c) Limited protective purpose of EU competition law?

A more substantial counterargument is to say that, in a normative sense, suppliers of price cartels do not (directly) suffer from decreasing competition. The cartel restricts competition in the selling market to the detriment of its customers, not in the buying market. The harms to suppliers result from the cartel members' efforts to minimize costs in response to a lower demand for their product. In the US, a similar reasoning serves to deny antitrust injury to suppliers.[157] While, as shown above, the doctrine of antitrust injury cannot be readily transplanted into competition law regimes with less pervasive private enforcement, the legal

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[153] See *Maier-Rigaud/Schwalbe*, Quantification of Antitrust Damages, Document de travail du LEM 2013-10, forthcoming in: *Ashton/Henry*, Competition Damages Actions in the EU: Law and Practice, Edward Elgar, 2014.

[154] Such an argument could loosely refer to *Lande*, 50 U of Chicago Law Rev 652 (1983), who argues that the optimal fine or damage award equals the net harm to others, however adjusted upward if the probability of detection is smaller than one. His view is often disputed especially with respect to European Competition law, see *Wils*, 29 World Competition, 183, 191 et seqq. (2006); *Manzini*, 31 World Competition 3 (2008).

[155] Joined Cases C-501/06 P, C-513/06 P, C-515/06 P and C-519/06 P, *GlaxoSmithKline Services Unlimited, v Commission*, [2009] ECR I-9291, para 63; Case C-8/08, *T-Mobile Netherlands et al.*, [2009] ECR I-4529, para 38. The protection of competition as such reflects the objective to foster and protect the economic intergration of the various EU member states in a common market, see on this goal Fox, in: *Richardson/Graham*, Global Competition Policy, 1997, p. 340; *Whish/Bailey* (fn. 2), p. 23 et seq.

[156] *GlaxoSmithKline Services Unlimited* (fn. 155) [2009] ECR I-9291, para 63; *T-Mobile Netherlands et al.* (fn. 155) [2009] ECR I-4529, para 39.

[157] See above text accompanying fn. 55-60.

systems of the member states have, as explained on the example of England and Germany, traditionally applied exceptions if damages fall outside the protective purpose of the law forbidding the tortious act. However, many scholars consider this to be incompatible with the ECJ case law in Courage,[158] which establishes that it is not necessary for the loss to occur in the same market than the lessening of competition that makes a defendant's conduct illegal. While we do not think that this requires abandoning all kinds of limitations by reason of a protective purpose, neither *Courage* nor *Manfredi* indicate such an exception with respect to the right of any individual to claim damages. Instead, the ECJ defines the scope of potential claimants exclusively by reference to a causal link between losses and the competition law infringement.[159] From a general tort law perspective, further restrictions seem indeed questionable because price increase and output restriction are inextricably intertwined: a price cartel would not be profitable if the cartel members did not adjust their input demand in view of falling demand for their output. Generally, a tortfeasor is liable for all damages that are inevitable and foreseeable effects of the tort, especially if they are brought about intentionally.[160] In the European context, unlike the US, there are no reasons to privilege cartel members with a more restrictive standard.

V. Estimation of supplier damages

The preceding analysis shows that there are good reasons to conclude that cartel suppliers have a community law based right to damages. Regarding the exercise of that right, the case law in *Courage* and *Manfredi* points to national civil law with respect to the standard of proof and the extent of damages recoverable.[161] The crucial challenge here is to determine the damages in question, which requires a sound empirical approach that enables victims to prove their losses and courts to sort out unfounded claims with sufficient precision. From a law and economics perspective, this is an essential condition for the preceding analysis to hold: Even if there are good arguments for a right to damages by suppliers pursuant to EU-law, this approach is recommendable only insofar as supplier damages can reasonably be estimated. In the following, we show that this is indeed possible:

Concerning the *direct quantity effect*, it is necessary to estimate a specific suppliers' decrease in sales volume due to the downstream cartel. This can be done by estimating a residual

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[158] See above text accompanying fn. 74.

[159] This interpretation of the ECJ case law is also shared by the German Federal Court, see *BGH*, case KZR 75/10, Selbstdurchschreibepapier ("ORWI"), NJW 2012, 928, 931, para 35.

[160] Pursuant to English law, damages recoverable in contract and tort are determined via two steps: First, a prima facie but-for test of causation ("cause in fact"), and, especially in negligence cases, a test referring to remoteness, proximate or effective causes ("cause in law"), that basically excludes losses that were not reasonably foreseeable (see *Tettenborn/Wilby* (fn. 57), p. p. 170 et seqq. (remoteness), p. 183 et seqq. (causation); McGregor on Damages, 18th ed. 2009, para 6-005 et seqq.; *Ogus*, The Law of Damages, 1974, p. 60 et seqq. With respect to deliberate torts and intentionally-caused damage, the latter test is arguably slightly relaxed in the sense that all harms directly flowing from the intentional illegal conduct are recoverable, see further *Ogus*, opt cit., p. 70 et seq.; McGregor, opt cit., para 6-014; *Tettenborn/Wilby* (fn. 57), p. 181 et seq. The US approach, already sketched in fn. 57 above, is quite similar, although the terminology partly differs. The same may be said with respect to German law, that has also developed two cumulative main tests: First, a but-for test, asking whether the defendant's illegal conduct was a condition sine qua non for the losses claimed; second, the occurrence of the harm claimed must have been reasonably foreseeable according to general life experience ("adequate Kausalität), see further *Lange/Schiemann*, Schadensersatz, 3rd, ed. 2003, p. 77 et seqq.; Grüneberg (fn. 122), Vorb § 249 paras 26 et seqq.

[161] *Bornkamm*, in: Langen/Bunte (fn. 110), § 33 GWB para 41.

demand model for this specific supplier that takes the emergence of the cartel into account.[162] The residual demand function captures the demand a specific supplier faces after the reaction of all other supplier-firms is taken into account. Hence, the residual demand function accounts for the strategic interdependency between competing suppliers, i.e. the fact that a change by one firm prompts the other firms in the same (e.g. supplier-)market to adjust their prices as well.

Assume that the demand a cartel supplier i faces in the market for its product (the input for the cartelized good) is given by

$$x_i = D_i(p_i, \boldsymbol{p_{-i}}, \mathbf{d}, \mathrm{C}), \quad (1)$$

where p_i is the unit price firm i charges for its product, $\boldsymbol{p_{-i}}$ a vector of prices charged by all other suppliers-competitors, $\mathbf{d}$ a vector of demand shifters and C a cartel binary variable (dummy) measuring demand changes due to the emergence of a downstream cartel. The first order condition of profit maximization provides the best-reply function of firm i,

$$p_i = R_i(\boldsymbol{p_{-i}}, \mathbf{d}, \mathbf{I}, q_i, C), \quad (2)$$

where $\mathbf{I}$ represents a vector of industry specific cost variables and q_i firm specific costs of firm i. The best-reply function denotes the optimal output price for firm i for given prices of all other firms.[163] Likewise, the vector of best-reply functions of all other firms is given as

$$\boldsymbol{p_{-i}} = R_{-i}(p_i, \mathbf{d}, \mathbf{I}, \boldsymbol{q_{-i}}, C). \quad (3)$$

Substituting vector (3) into firm i's demand function (1) yields the residual demand function for firm i:

$$x_i^r = D_i^r(p_i, \mathbf{d}, \mathbf{I}, \boldsymbol{q_{-i}}, C). \quad (4)$$

Note that since price and quantity of firm i are jointly determined, the residual demand function must be estimated with a two-stage-least-squares instrumental variable (IV-) estimation. A suitable instrument for p_i is q_i, because firm specific cost of firm i is generally correlated with p_i but uncorrelated with the residuals.[164] The econometric implementation of the second stage of an IV-estimation of the residual demand function (4) is then given as follows:[165]

$$x_{i,t}^r = \beta_0 + \beta_1 \widehat{p_{i,t}} + \beta_2 C_t + \beta_3' \boldsymbol{d_t} + \beta_4' \boldsymbol{I_t} + \beta_5' \boldsymbol{q_{-i,t}} + u_{i,t}. \quad (5)$$

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[162] The residual demand model was proposed by Baker and Bresnahan (1988) with the objective to estimate market power of firms in product differentiated industries. See *Baker, J. B. and Bresnahan, T. F.*, Estimating the residual demand curve facing a single firm, International Journal of Industrial Organization 6 (1988), pp. 283-300. We merely describe the main steps and features of this approach as presented by *Motta*, Competition Policy: Theory and Practice, 2004, p. 125, however, adjusted with respect to the existence of a downstream cartel.

[163] The underlying assumption of this approach is that supplier *i* behaves like a Stackelberg-leader in the supplier market.

[164] See Motta (fn. 162), p. 127.

[165] Note that the model is not specified as a panel but as a time series. As before, the subscripts *i* and *–i* indicate whether the respective variables refer to firm *i* or all other firms. The subscript *t* indicates the time dimension (weekly, monthly or yearly).

$\widehat{p_{i,t}}$ is the estimated price obtained from the first stage IV-estimation[166], C_t a binary variable equal to one during the cartel period and zero otherwise, and $\boldsymbol{d}$, $\boldsymbol{I}$ and $\boldsymbol{q_{-i}}$ vectors of exogenous variables that affect demand, industry specific cost variables and firm specific cost drivers from firms other than firm i.

The approach used to determine the quantity effect is equivalent to the *before-and-after method* for overcharge estimations. In the present context, it compares pre- and/or post cartel sales to the sales of the supplier during collusion, relying on the assumption that the competitive situation in the market but for the cartel would have evolved similar to the situation before and/or after collusion. The estimation therefore requires data of the respective variables from the cartel period as well as the non-cartel period.[167]

The average output reduction incurred by the cartel supplier per period during cartelization is now given by the estimated coefficient $\widehat{\beta_2}$, and the harm associated with the quantity effect (as described in section II 2) amounts to

$$\left[\sum_{t=1}^{T} \widehat{\beta_2} C_t\right][p^* - c^*]. \tag{6}$$

The first term sums up the output decreases over the entire cartel period, and is then multiplied by the price-cost margin earned by the cartel supplier in the counterfactual competitive scenario.

The price-cost margin can be estimated by means of supplier i's residual demand elasticity, as we will show during the following analysis of the remaining determinants of a supplier's overall damage, the price and cost effect.[168] These effects shown in Table 1 (section II 2, p.6) are given by

$$\tilde{x}_{i2}(p^* - \tilde{p}) - \tilde{x}_{i2}(q^* - \tilde{q}),$$

which can be rewritten as

$$[(p^* - q^*) - (\tilde{p} - \tilde{q})]\tilde{x}_{i2}. \tag{7}$$

Expression (7) corresponds to the difference between the supplier's price-cost margin under competition and under collusion, multiplied by the quantity sold to the cartel members during collusion. To quantify the price and cost effect, it is therefore necessary to estimate the price-cost margin of the supplier for both regimes. This can be done by means of firm i's Lerner Index of market power, given as

$$L_i = \frac{p_i - q_i}{p_i} = -\frac{1}{\varepsilon_i^r},$$

where ε_i^r denotes the residual demand elasticity faced by supplier i in the supplier market. The Lerner Index relates the firm's mark-up (price minus marginal costs) to the price charged by the firm. In case of perfect competition in the supply market, the Lerner Index is zero,

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[166] In the first stage of the two-stage-least-squares IV estimation p_i is regressed on q_i as well as all other right-hand side variables included in the second stage. Although not specified here, the first stage regression results also constitute a test for whether p_i is correlated with q_i, i.e. whether q_i can be used as instrument for p_i. For a detailed description of instrumental variable estimation, see *Wooldridge, J. M.*, Introductory Econometrics: A Modern Approach. Second Edition, 2003, Thomson South-Western.

[167] For a more detailed description of the before-and-after approach as well as other econometric methods for estimating cartel overcharges, see, e.g., *Davis/Garcés*, Quantitative Techniques for Competition and Antitrust Analysis, 2010, pp. 347-380.

[168] Alternatively, the price-cost margin could also be determined with the help of accounting data.

suggesting that no price and cost effects occur. With increasing market power the Lerner Index increases up to the theoretical maximum value of 1 under monopolization.
We can derive the residual demand elasticities for both periods of time (collusion and non-collusion) by estimating a slightly different version of the residual demand model described above (equation (5)):[169]

$$ln\, x_{i,t}^{r} = \beta_0 + \beta_1 \widehat{ln\, p_{i,t}} + \beta_2 C_t + \beta_3 \widehat{ln\, p_{i,t}} C_t + \beta_4' \boldsymbol{d_t} + \beta_5' \boldsymbol{I_t} + \beta_6' \boldsymbol{q_{-i,t}} + u_{i,t} \qquad (8)$$

The only difference to model (5) is that both quantity and instrumented price of the supplier are in logarithm and that an additional interaction term between instrumented price and cartel-time dummy $(\widehat{ln\, p_{i,t}} C_t)$ is included. The residual elasticity of demand during and outside the cartel period for supplier i is now given as

$$\varepsilon_i^r = \frac{\partial ln\, x_{i,t}^r}{\partial \widehat{ln\, p_{i,t}}} = \beta_1 + \beta_3 C_t \text{ , with } C_t = \begin{cases} 1 \; during\ the\ cartel\ period \\ 0 \; during\ the\ competition\ period. \end{cases}$$

The estimated demand elasticities in the cartel and the non-cartel period combined with price data of the cartel supplier make it possible to calculate price-cost margins, which can then be used to jointly calculate the price and cost effect as defined in expression (7).[170] The estimated price-cost margin during the competitive period additionally complete the calculation of the direct quantity effect as stated in (6).
In principle, the approach described in this section could also be applied to a group of firms, for instance a group of (supplier-) claimants. One then would have to treat this group as one single firm in the market and estimate the residual demand for the entire group. However, such an approach is subject to at least one important disadvantage: Unlike purchasers who are generally exposed to the same price effect, cartel suppliers might encounter substantially different quantity effects. To illustrate, assume that the cartel members decrease their input demand by 10 percent due to the infringement. They might then either reduce their input demand equally by 10 percent with respect to each supplier, or cut demand to a greater extent or even to quit the business relationship with respect to certain suppliers only. In an extreme case, this might even entail a larger input demand from other suppliers in order to receive bulk discounts. Hence, unlike in the case of an average overcharge, it is critical to suppose that a general decrease in residual demand of 10 percent harms all suppliers equally by a 10 percent reduction in sales. If this assumption is not warranted, separate estimations for each supplier are preferable.

VI. Conclusion

Private enforcement of competition law is on the rise worldwide and has been on top of the agenda of European competition policy for almost one and a half decades now. However, while actions for damages by cartel customers have received much attention, the numerous other parties that may incur losses due to a cartel are usually neglected. In particular, suppliers to a downstream price cartel have mostly been overlooked so far. Such suppliers incur losses

[169] Again, model (8) reflects the second stage of a two-stage-least-squares estimation. For information on the first stage regression, see footnote 161.

[170] It is worth mentioning that the price-cost margins of cartel and non-cartel period might not be significantly different, especially when the quantities sold by the supplier to cartel firms merely represent a small fraction of his total output or when the degree of competition in the supplier market is high. In such cases one should rather abstract from price and cost effects and primarily concentrate on the direct quantity effect.

subject to three effects: Cartel members lower sales and correspondingly their input demand (*direct quantity effect*), which in turn affects the price suppliers can charge for their product (*price effect*) and their production costs (*cost effect*).

Whether suppliers are legally entitled to damages for such losses is however far from self-evident. While the EU and the US both seem to generously grant damages to "any individual" or "any person" harmed by a cartel, the standards on supplier standing actually diverge: In the US, although a clear and consistent body of case law on supplier standing is missing, the majority view currently denies standing. By contrast, the emerging position in the EU is to grant suppliers a right to damages. In particular, if follows from the case law in *Courage v. Crehan* that in the EU, unlike in the US, a right to damages caused by a competition law infringement does not require the loss to occur in the same market than the lessening of competition that makes the defendant's conduct illegal. The type of loss which the competition provisions are intended to prevent is therefore broader in the EU than in the US, although many details are still open. This affects the laws of the EU member states that, subject to the EU-law principles of equivalence and effectiveness, currently govern action for damages. Indeed, both Germany and England have abandoned important traditional limitations on standing in order to comply with the ECJ case law.

We argue that a more liberal approach to standing in the EU compared to the US can be justified in view of the different institutional context and the goals assigned to the right to damages in the EU. Based on this view, cartel suppliers in principle have a right to damages, as no general restrictions on standing ought to apply; the causation requirement will be one of the main hurdles to clear for them. Sound econometric estimation techniques are of major importance to overcome this obstacle. In this respect, we show that damages of a specific supplier can be estimated with a residual demand model that is adjusted for the emergence of a downstream cartel.

Overall, our results therefore suggest that (i) cartel suppliers in principle have standing to claim damages according to EU law and that (ii) it is generally possible to quantify those damages with sufficient precision, making supplier claims a viable option that can contribute to full compensation and greater cartel deterrence irrespective of further collective action mechanisms.