

COMPETITION PENALTIES & DAMAGES
in a
CARTEL CONTEXT:
Criminalisation & the Case for Custodial Sentences

by
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I. Introduction.

Price-fixing, and related “hard-core” cartel behaviour¹, are theft and recognised to be such under Irish law. The Competition Act, 2002 addresses price-fixing in two ways: First, it is a crime on indictment and the Act vests the Competition Authority and the Director of Public Prosecutions with the power to investigate and prosecute respectively.² Upon conviction, individuals may be sentenced to a maximum of five years imprisonment and fined up to €4,000,000.³ Second, it creates a private right of action to compensate those

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¹ The terms “price-fixing,” “cartel behaviour” and the like refer to that set of competition offences generally grouped under the heading of “hard-core” violations and include price-fixing itself, bid-rigging, and the allocation of markets whether by geography, customer or product. By “price,” I refer to the “net price. Thus an agreement among sellers to allow buyers a thirty day net credit payment period would be treated as price fixing since the amount of “free” credit is very much price related. An agreement to eliminate “free” delivery would be treated likewise.

Hard core offences in Irish competition law are specifically mentioned in the Competition Act, 2002:

It shall be presumed that an agreement between competing undertakings...the purpose which is to

- (a) directly or indirectly fix prices....,
- (b) limit output or sales, or
- (c) share markets or customers,

has as its object the prevention, restriction or distortion of competition....

Competition Act 2002, Section 6(2).

² Section 8, Competition Act, 2002.

³ Conviction on indictment may result in a maximum corporate and individual fine of €4,000,000 or 10% of the turnover, whichever is lower, during the prior financial year. Section 8(1)(b), Competition Act, 2002.

injured by cartel conduct.⁴ Thus, the law focuses on both *deterrence*⁵ and *compensation*.

Deterrence and compensation are both appropriate objectives. Although fines and compensation payments can provide some deterrence, only custodial sentences are likely to be effective. Fines and compensatory damages would have to be much higher than current levels to effectively deter. Such an increase is politically infeasible. Thus, satisfaction of the deterrence objective is contingent on imposition of custodial sentences.

Compensation, while a laudatory objective, is difficult to achieve. Interests injured by anticompetitive cartel behaviour run from the economy generally to a range of buyers and sellers. Identification of injured parties and measurement of the amount of injury can be very difficult. Courts in many jurisdictions have applied arbitrary rules in order to provide some element of compensation in an administratively efficient way. As a result, compensation of injured parties has been achieved only in a very rough sense.

Accordingly, *deterrence* ought be the primary objective. The success of the Competition Act, 2002 depends in large measure on the willingness of the judiciary to impose custodial sentences on individuals found to be in violation of its cartel prohibitions.

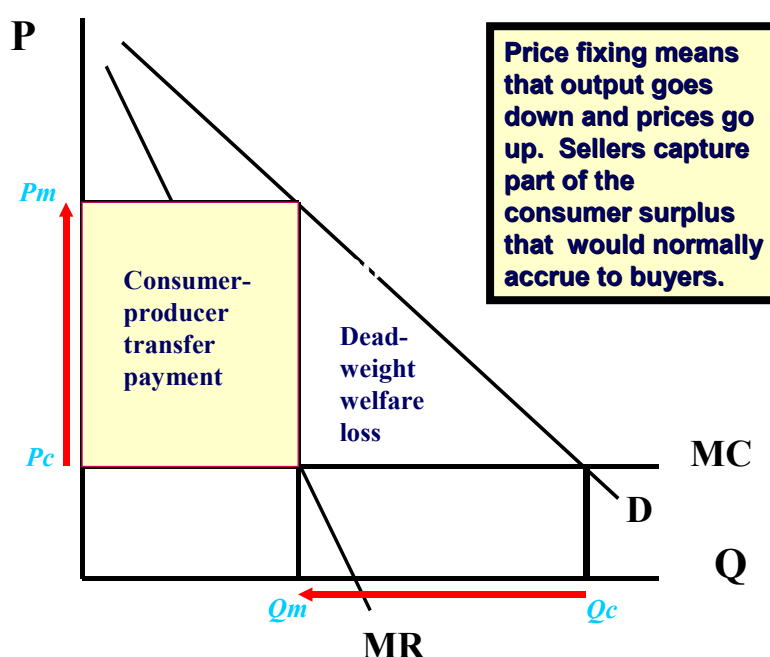
⁴ Section 14, Competition Act, 2002.

⁵ The focus is on *general* deterrence, *i.e.*, punishment of one deters other similarly situated entities from engaging in similar criminal behaviour. *Specific* deterrence, *i.e.*, punishment deters the individual from recidivist behaviour, is less important to competition law. While there is an absence of good data, anecdotal evidence suggests that recidivism by individuals is virtually non-existent. Repeat behaviour by legal entities is more of a problem because of changes in executive leadership over time.

II. Cartels: “Thieves in well dressed suits.”

Price fixing results, *ceteris paribus*, in output going down and prices going up. *Buyers pay higher prices*. Economics texts sometimes refer to this as the “consumer-producer transfer payment.” Although some buyers will be deterred from purchasing because of the artificially high price, others will purchase at or below their “reserve price”. That difference between the

Diagram A



competitive price and the collective reserve price is often referred to as the “consumer surplus.” Many economists would suggest that their “dismal science” has little to say about who “owns” that surplus.⁶ In Ireland Parliament has resolved this issue.

⁶ This author has elsewhere argued that the appropriate focus ought to be on the efficiency, rather than distributive, consequences of monopoly. Calvani, “What Is the Objective of Antitrust,” *Economic Analysis & Antitrust Law* 7, 8 (Calvani & Siegfried eds., 2nd ed. 1988). Why would buyers better deserve the surplus than sellers? Since buyers generally are less well off than sellers, some suggest that a re-distributive goal is appropriate. However, this argument is not without difficulty. First, monopoly rents may be capitalised, *e.g.*, taxi medallions. Second, given our lack of knowledge about ownership we need to be careful about identifying winners and losers. The monopoly yacht

The Competition Act, 2002 creates a property right that is vested in buyers. Put differently, buyers have a legal right to purchase at a competitive price. Sellers who fix prices take what belongs to others. In other words, they steal. Accordingly, it is appropriate under Irish law to view price-fixing as theft.

This view is consistent with that of many other jurisdictions. A recent OECD report puts it well: “Hard core cartels are the most egregious violations of competition law.’ This conduct, which includes agreements among competitors to fix prices, restrict output, submit collusive tenders or share markets, ‘injures consumers...by raising prices and restricting supply.’”⁷

III. Deterrence.

Although library shelves groan under the weight of legal and economic scholarship devoted to the substance and process of competition law and policy, by comparison there has been relatively little work devoted to

manufacturer may be owned by a “blue-collar” pension fund. Third, and most importantly, competition policy is an inefficient tool for income redistribution. *See generally* Kaplow & Shavell, “Why the Legal System Is Less Efficient Than the Income Tax in Redistributing Income,” 23 *J.Legal Stud.* 667 (1994).

In the end, however, this debate over re-distributive and efficiency objectives is less interesting outside the academy since the majority of monopoly situations involve both. *See* Calvani, “Rectangles & Triangles: A Response to Mr. Lande,” 58 *Antitrust L.J.* 657 (1989). Judge Richard Posner also argues that the distinction is less important because the costs devoted to obtaining and maintaining a monopoly position should be characterized as social losses. *See* R. Posner, *Antitrust Law* 9-23 (2nd ed. 2002) [hereinafter “*Posner*”]. For an interesting and now classic debate on the general debate about the purposes of competition policy, compare Bork & Bowman, “The Crisis in Antitrust,” 65 *Colum. L.Rev.* 363 (1965), with Blake & Jones, “In Defense of Antitrust,” 65 *Colum. L.Rev.* 377 (1965). For a more recent exposition of this debate, see Elzinga, “The Goals of Antitrust: Other than Competition & Efficiency, What Else Counts?” and Sullivan, “Economic & More Humanistic Disciplines: What Are the Sources for Antitrust?” in *Antitrust Jurisprudence: A Symposium on the Economic, Political and Social Goals of Antitrust Policy*, 125 *U.Pa. L.Rev.* 1182 (1977).

⁷ OECD Competition Committee, Second Report on Effective Action Against Hard Core Cartels 3 (2003), *quoting* OECD, 1998 Recommendations of the OECD Council Concerning Effective Action Against Hard Core Cartels.

competition law remedies.⁸ This discussion is necessarily dependant on limited empirical work and anecdote. Nonetheless, the data suggest that monetary payments are unlikely to sufficiently deter cartel behaviour and that custodial sentences are necessary.⁹ This conclusion is consistent with the author's own experience at the defence bar in the United States and with the views of others within the enforcement community.

a. Deterrence generally.

- i. Preliminary note--Need to differentiate between cartels and other types of anticompetitive behaviour.

Competition law generally and the Competition Act, 2002 treat horizontal conduct, vertical restraints, the abuse of dominant positions and mergers among other types of business behaviour. Given the diversity of subjects covered, it is important to recognise that we want to deter some conduct more than others.

⁸ There is a growing body of literature that focuses on public law enforcement generally. *See, e.g.*, Shavell, "Economic Analysis of Public Law Enforcement & Criminal Law," John M. Olin Center for Law, Economics, and Business, Discussion Paper No. 405 (Feb. 2003) at www.law.harvard.edu/programs/olin_center; Shavell & Polinsky, "The Optimal Use of Fines & Imprisonment," 24 *J. Pub. Econ.* 89 (1984), and Fischel & Sykes, "Corporate Crime," 25 *J. Legal Stud.* 319 (1996). This is not to suggest that competition remedies have not received some attention from serious scholars. It has. *See, e.g.*, Posner 266-86; W. Breit & K. Elzinga, *The Antitrust Penalties: A Study of Law & Economics* (1969); and Landes, "Optimal Sanctions for Antitrust Violations," 50 *Univ. Chi. L.Rev.* 652 (1983). For a very recent empirical study, see Connor & Lande, "How High Do Cartels Raise Prices: Implications for Reform of Antitrust Sentencing Guidelines," (American Antitrust Inst. Working Paper 01-04 at <http://www.antitrustinstitute.org/recent2/342.pdf>; *see also* Clark & Evenett, "The Deterrent Effects of National Anticartel Laws: Evidence from the International Vitamins Cartel," 48 *Antitrust Bull.* 689 (2003).

⁹ The appropriate length of a custodial sentence is not discussed here. The United States has very recently increased the maximum custodial sentence for violation of the Sherman Act to ten years. U.S. Dept. of Justice, Press Release, June 23, 2004. Whether this increase was necessary is open to discussion. One may argue that even a very short period of incarceration has a devastating effect on the corporate executives who are likely to commit antitrust offences. Accordingly, the marginal benefit associated with the increase in sentences may be slight.

There is an optimal level of deterrence. Over deterrence can be a problem,¹⁰ but it is more of a problem for some areas of competition law than for others. Consider predatory pricing, for example.¹¹ It is well accepted that the practice is not commonplace,¹² and that it is often difficult to distinguish from vigorous price competition of the variety generally encouraged by competition policy.¹³ By overly penalizing predatory pricing (with custodial sentences, for example), rational business executives may price products more conservatively lest their pricing be mistakenly identified as predatory.¹⁴ Competition law, which generally fosters lower prices, could perversely encourage higher prices than might otherwise prevail.

While there are costs associated with the over-deterrence of theft, they are generally less worrisome. Cartel conduct—unlike predatory pricing or abuse of dominance—is seldom ambiguous.¹⁵ Moreover, it is almost always harmful. Because the costs of over-deterrence in the non-cartel areas of

¹⁰ Engineering studies suggests that the use of “clover-leaves” instead of four-way road intersections would save lives in the United States. Nonetheless, we consciously decide not to employ these life saving designs because we would rather devote resources elsewhere. Put differently we prefer a certain amount of highway fatalities to the alternative. Thus the optimal level of highway fatalities may not be zero.

¹¹ For a discussion of predatory pricing, see generally Calvani, “Predatory Pricing and State Below-Cost Sales Statutes in the United States: An Analysis; Report to the Canadian Competition Bureau” (April 1999) at www.strategis.ic.gc.ca/pics/ct/calvani.pdf.

¹² See Brooke Group Ltd. v. Brown Williamson Tobacco Corp., 509 U.S. 209 (1993), where Justice Kennedy, writing for the Court, observed that “predatory pricing schemes are rarely tried.”

¹³ Judge Easterbrook referred to these tasks as “difficult business” in A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc., 881 F.2d 1396, 1400 (7th Cir. 1989). See generally Posner 207-223 and Brook Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993). See also Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227 (1st Cir. 1983; Breyer, J.) for a good discussions of these issues. See also Areeda & Turner, “*Predatory Pricing & Related Practices Under Section 2 of the Sherman Act*”, 88 *Harv. L.Rev.* 697 (1975), and K. Hylton, *Antitrust Law: Economic Theory & Common Law Evolution* 212-229 (2003).

¹⁴ Or as Judge Posner puts it: Penalties “may deter lawful conduct at the border of the prohibition. They may induce potential defendants to steer too far clear of the intended zone.” Posner 267. He goes on to say that this is a particularly serious problem in those areas of antitrust law where the “line between efficient and inefficient conduct is often fuzzy.” *Ibid.*

¹⁵ This is not to say that price fixing is easy to detect, but that once found it is easy to identify. Of course there are difficult cases. See generally Calvani, “Some Thoughts on the Rule of Reason,” 22 *Eur. Comp. L. Rev.* 201 (2001). But ambiguous cases are not the meat and potatoes of cartel enforcers, and such cases are almost always brought as civil matters. One prominent competition enforcement agency has a “Five Minute Rule,” which holds that the matter is by definition civil if it takes more than five minutes to discuss that issue.

competition law may be different, this discussion is limited to hard-core price-fixing and the like.

ii. Fines and other monetary payments do not provide sufficient deterrence.¹⁶

As a general matter, the penalty for price-fixing ought equal the cost to society of the illegal conduct.¹⁷ Assuming that the cost to society equals that of the overcharge,¹⁸ deterrence requires that price-fixers must be made to divest the overcharge. As long as the price fixer retains a sufficient measure of the unlawful gain, the monetary penalty is essentially a license fee and cannot be expected to deter. Forcing all price-fixers to divest themselves of their ill-gotten gain should optimally deter.¹⁹

Unfortunately, competition authorities probably detect, investigate and successfully prosecute only a small fraction of price-fixers.²⁰ Given the low probability of detection, the optimal fine must be adjusted to reflect the fact that most price-fixers will escape scrutiny.²¹ It must be significantly higher

¹⁶ The remainder of this section borrows from Calvani, "Enforcement of Cartel Law in Ireland," *Annual Proceedings of the Fordham Corporate Law Institute* 1 (Hawk ed. 2004).

¹⁷ See generally G. Becker, "Crime & Punishment: An Economic Approach," 76 *J.P.E.* 169 (1968), and R. Posner, *Economic Analysis of Law* (5th ed. 1998).

¹⁸ This assumption *understates* the cost to society by ignoring all costs except those borne by the purchasers of the good or service. The actual costs are higher, but this lends even more support to the proposition that the imposition of monetary penalties under-deters. See notes 43-45 and accompanying text, *infra*.

¹⁹ This assumes the price-fixers to be risk neutral. See note 21, *infra*.

²⁰ Two investigators who have investigated this issue in the U.S. suggest that only between 13-17% of price-fixers were ultimately successfully prosecuted during the period studied. See Bryant & Eckard, "Price Fixing: The Probability of Getting Caught," 73 *Rev. Econ. & Stat.* 531 (1991). Unfortunately, there is little else in the literature on this point, and it is a good example of the earlier observation that the literature is less than robust. Nonetheless, the conclusion seems reasonable in light of our experience and what we know about the successful prosecution of other forms of theft. Only about 19% of larceny/theft crimes are result in arrest and prosecution. The conviction rate of these is about 71%. U.S. Dept. of Justice, *Sourcebook of Criminal Justice Statistics 2000* 383. Cf. Connor & Lande, note 8, *supra*, (noting that in 1986 former Ass't Attorney General Douglas Ginsburg estimated that only about 10% of cartels are detected, but that the U.S. amnesty programme may have increased the detection rate.)

²¹ Bentham observed some time ago that the penalty must be adjusted to account for the probability of escaping punishment. J. Bentham, *An Introduction to the Principles of Morals & Legislation* (1789). More recently Judge Posner reminds us: "The correct fine under the assumption of risk neutrality is calculated by dividing the social cost of the violation by the probability of apprehension and

than the value of the consumer-producer transfer, *i.e.*, the illegal mark-up. Given what we know about the probability of detection, the magnitude of the mark-up and the duration of most conspiracies, monetary penalties would have to be very high. Wouter Wils, in an important contribution to this discussion, concludes that monetary penalties on average would have to be in the range of 150% of annual turnover to deter.²² More recent work by Professors Connor and Lande suggest that Wils may have underestimated the appropriate multiple.²³ This is quite a contrast to the commonly employed maximum of 10% of annual turnover.²⁴

Obviously such a fine would often exceed the ability of the defendant to pay. Indeed, one study suggests that close to 60% of firms would be unable

punishment.” *Posner* 269. If the cost of the price fixing conspiracy is €1,000,000 and the risk of detection and successful prosecution is 15%, then a risk neutral defendant should be indifferent as between compliance and commission of the offence with a fine of € 6,666,666. A risk neutral defendant is one who is indifferent as between the expected cost and its certain equivalent. *Ibid.* Posner suggests that most public corporations are likely to be risk-neutral. *Ibid.* For a discussion of the relevance of risk neutrality, see Polinsky & Shavell, “The Optimal Tradeoff Between the Probability & Magnitude of Fines,” 69 *A.E.R.* 880 (1979).

²² See Wils, “Does Effective Enforcement of Articles 81 & 82 EC Require Not Only Fines on Undertakings but also Individual Penalties, in Particular Imprisonment?”, *Effective Private Enforcement of EC Antitrust Law* (C. Ehlermann ed. 2002). Wils, assumes an average 10% cartel overcharge based on the conclusion of the U.S. Sentencing Commission which may have relied on data compiled from the road-building cartel cases of the 1980’s. *Supra* at 21. Others have reached the same conclusion. See Werden & Simon, “Why Price-Fixers Should Go to Prison,” 32 *Antitrust Bull.* 917, 924 (1987). Wils’ calculation also assumes that cartels have a five year duration. Wils, *supra* at 23.

²³ Connor and Lande note that the source for the 10% average overcharge may have been a comment made by then Assistant Attorney General Douglas Ginsburg before the Sentencing Commission. *Cf. Cohen & Scheffman*, “The Antitrust Sentencing Guidelines: Is the Punishment Worth the Cost?”, 27 *Am. Crim. L. Rev.* 331 (1989), where the authors conclude that data from a few price fixing cases provided support for the conclusions of the Assistant Attorney General and the Sentencing Commission.

Importantly, Connor and Lande have collected and analysed all of the overcharge studies from which they conclude that “the lynchpin of modern criminal fines—the...assumption that cartels raise prices by 10% is supported by a surprisingly small amount of evidence.” Connor & Lande, note 8, *supra*. More importantly they have undertaken their own study from which they conclude that the median overcharge was 27% (20-21 for domestic U.S. cartels and 33-34% for international cartels). Focusing on the period post-1990, they find that the overcharge is 15-16% for domestic U.S. cartels and 25% for international cartels.

Connor and Lande also note that cartel duration is likely longer than five years. Connor & Lande, note 8. They suggest that studies reflect that cartels last 7-8 years. For an examination of cartel durability, see Connor, Private International Cartels: Effectiveness, Welfare & Anticartel Enforcement,” Staff paper #03-12, Dept. of Agricultural Economics, Purdue Univ. (Nov. 5, 2003).

²⁴ *Cf. OECD, supra* note 7, at 19.

to survive the imposition of an optimally deterrent penalty without bankruptcy.²⁵ Liquidation would impose significant costs on third parties, such as workers made redundant, reduction of a community's tax base, harm to suppliers, and others. Liquidation may also result in the further concentration of the market. It is very doubtful whether any parliament would have the stomach for what is the equivalent of corporate capital punishment for price-fixers. The external costs that such a penalty would impose on third-parties makes what was very doubtful beyond the realm of imagination. Thus, corporate fines cannot be the solution.

The focus then ought be on individuals. Cartels do not occur absent human intervention. An OECD report observes: "As agents of corporations commit violations of competition law, it makes sense to prevent them from engaging in unlawful conduct by threatening them directly with sanctions and to impose such sanctions if they violate the law."²⁶ There is another reason why sanctions against individuals are appropriate. Application of a rational deterrence model to legal entities presents an agency problem. The business executive making the decision may confront different incentives from those confronting the corporation. A businesswoman, for example, may value the next quarter's results far heavier than a possible fine on the corporation eight year's hence after her retirement. The interests of shareholders might be quite different.²⁷

²⁵ See Craycraft, Craycraft & Gallo, "Antitrust Sanctions & A Firm's Ability to Pay," 12 *Rev. Indus. Org.* 171 (1997); Wils, *supra* note 22, at 20.

²⁶ See OECD, *supra* note 7, at 2.

²⁷ The businesswoman's short-term horizon is but one example. The businessman, facing dismissal for poor returns, may view the small risk of dismissal that would accompanying a corporate fine for price fixing insignificant when compared with retaining his position with possible advancement and reward.

Does this focus on individual actors necessarily require custodial sentences? Crafting an effective monetary deterrent for individuals would be most difficult. First, measuring the optimal fine for specific individuals would require a level of analysis that courts are ill equipped to apply. Even if it were feasible, it is highly doubtful whether a large number of such individuals would be able to pay an efficiently deterring fine. Second, it would be extremely difficult to insure that the burden of the penalty was actually borne by the individual. Although laws can forbid companies from reimbursing fines paid by executives, in practice such laws are very difficult to police.

In summary, corporate fines do not adequately deter and an increase in such fines to an optimal level is not politically feasible.²⁸ Crafting an optimally deterrent individual fine would be extremely difficult. Moreover, firms within concentrated industries with poor entry conditions may ultimately be able to pass-on some or all of the fines to their customers. Custodial sentences are the only sanction likely to provide sufficient deterrence.

²⁸ There are those who disagree. See, e.g., *Posner* 266 et seq.; W. Breit & K. Elzinga, note 8, *supra*; Posner, "Optimal Sentences for White Collar Criminals," 17 *Am. Crim. L.Rev.* 409 (1980). All are very serious scholars and their opposing view merits attention.

Focusing on the most recent exposition of this view, Judge Posner states: "imprisonment is imposed so rarely in antitrust cases that its deterrent effect may be slight." *Posner* 270. Judge Posner goes on to correctly observe that even draconian penalties will not deter if they are imposed with insufficient frequency. *Supra* at 217. In support of his thesis, Judge Posner relies on sentencing data from 1970 to 1999. Viewing his data it would appear that few convicted price-fixers see the inside of a jail.

Period	Cases with fines	Cases with jail
1970-1979	156	25
1980-1989	513	196
1990-1999	324	61

The problem with Judge Posner's conclusion is that it fails to take into account recent history where there has been a dramatic increase in the average amount of prison time served. See note, 33, *infra*, and accompanying text for a summary of current sentences.

Breit and Elzinga also focus on their observation that incarceration was uncommon and conclude that custodial sentences will not be a realistic deterrent until judges are willing to impose such sentences on convicted business executives. Breit & Elzinga, *supra* at 30-43. Things have changed. See notes 33-35, and accompanying text, *infra*.

- b. The experience of other competition regimes suggests that custodial sentences deter.

The experiences of other countries with custodial sentences would suggest that imprisonment for cartel offences is appropriate. These issues have been the subject of extensive discussion within the OECD. A recent Working Paper of the Competition Committee put it this way: “The prospect of spending time in jail will be the most powerful deterrent for business executives considering entering into a cartel arrangement.”²⁹

This view is consistent with the U.S. experience. Although the Sherman Act had long had criminal sanctions,³⁰ it is only relatively recently that custodial sentences have been imposed routinely.³¹ This author believes that the incidence of domestic price-fixing has declined since courts began to routinely impose non-trivial custodial sentences. Prominent counsel agree. As Arthur Liman, for example, has observed:

For the purse-snatcher, a term of imprisonment may be little more unsettling than basic training in the army. To the businessman, however, prison is the inferno, and conventional risk-reward analysis breaks down when the risk is jail. The threat of

²⁹ OECD Competition Committee Working Party No. 3 Discussion Paper, Sanctions Against Individuals, Including Criminal Sanctions, in Prosecuting Cartels 3 (Aug. 2003).

³⁰ On June 24, 2004, President Bush signed into law a further amendment that increased the custodial sentence to a maximum of ten years. U.S. Dept. of Justice, Press Release, June 24, 2004.

Early proposals for antitrust sanctions were diverse and included denying violators the use of the post, the right to litigate in the federal courts, forfeiture of goods and assets, imposition of special taxes and denial of the use of the Panama Canal. For an interesting discussion of these historical proposals, see Briet & Elzinga, *supra* note 28, at 17-29.

³¹ It was not always so. While the Antitrust Division has prosecuted price fixers for many years, the sanctions imposed by the courts were sometimes trivial. For example, a well-respected judge (who was later to serve as Deputy Attorney General under President Carter) sentenced convicted price fixers to give speeches to businessmen’s lunches on the evils of price fixing. See United States v. Blankenship, No. CR-74-182 –CBR (N.D. Cal., filed Nov. 1, 1974). For a discussion of the sentences from the perspective of the judge, see Renfrew, “The Paper Label Sentences: An Evaluation,” 86 Yale L.J. 590 (1977). For a critique of that decision, see Baker & Reeves, “The Paper Label Sentences: A Critique,” 86 Yale L.J. 619 (1977), where the authors conclude that “[t]he only suitable punishment for price fixing... is a prison sentence.” See also Dershowitz, “The Paper Label Sentences: A Critique,” 86 Yale L.J. 626 (1977), where he argues that the substitution of speech-making in lieu of a statutory penalty was an inappropriate use of judicial discretion, and Liman, “The Paper Label Sentences: Critique,” 86 Yale L.J. 619 (1977), where the author concludes that “[i]f the... penalty for price fixing were a fine and an obligatory speech, then the antitrust laws would be as forbidding as the village parking ordinance.”

imprisonment, therefore, remains the most meaningful deterrent to antitrust violations.”³²

Common sense suggests as much.

During 2002 convicted price fixers in the United States served more than 10,000 days in prison.³³ Last year sentences averaged 21 months.³⁴ This represents an increase in both the length and frequency of custodial sentences. Although anecdotal, there is evidence that these sentences are having a significant effect. During the 1990’s the authorities uncovered a good number of cartels where the participants were undeterred from price-fixing as long as they conducted their meetings outside the United States.³⁵ More recently, however, the Antitrust Division has received amnesty applications from entities engaged in international cartel behaviour, but where those entities consciously avoided bringing their cartels into action in the United States.³⁶ This suggests that the cartels were deterred from implementing their conspiracies in the U.S., but undeterred from implementation elsewhere.³⁷

³² Liman, *supra* at 630-3; *cf.* Baker, “The Use of Criminal Law Remedies to Deter & Punish Cartels & Bid-Rigging,” 69 *Geo. Wash. L.Rev.* 693, 694-96 (2001). Although purely anecdotal, the often-cited example of an American businessman who took his own life rather than serve even a short-term sentence of imprisonment suggests the power of custodial sentences. *See also* Werden & Simon, *supra* note 22, at 936.

³³ Address of Dir. Crim. Enforcement, Antitrust Div., U.S. Dept. of Justice, Scott Hammond, New York State Bar Assoc. Meeting, New York, Jan. 23, 2003. Although the relationship between cartel behaviour and factors such as population or gross national product is likely non-linear and much more complicated, it is interesting nonetheless to scale the U.S. experience to that of Ireland. As noted earlier, some 10,000 days of prison time were served for competition offences in the U.S. during 2002. Using population (0.7%) or gross national product (1%) as bases, one could find 70 or 100 prison days in Ireland respectively.

³⁴ Phelan, “Recent Developments in Criminal Enforcement at the Antitrust Division,” *Criminal Practice & Procedure Committee*, p. 4, No. 33 (May 2004).

³⁵ The Lysine, Graphite Electrode, Citric Acid, and Sodium Gluconate Cartels come to mind. The fact that they selected venues outside the U.S. ultimately provided the participants little comfort.

³⁶ The Antitrust Division has not taken action on these cases since the cartel did not have an effect within the United States. Address of Dir. Crim. Enforcement, Antitrust Div., U.S. Dept. of Justice Scott Hammond, ICN Cartel Conference, Sydney, Nov. 20, 2004.

³⁷ U.S. Department of Justice officials have noted apparent recidivism within sectors of the chemicals industry. *See, e.g.*, Remarks of Phillip Warren, Panel on International Antitrust, Calif. Bar. Assoc. Golden State Inst., Los Angeles, Oct. 21, 2004. One might question the effectiveness of custodial

- c. Theory aside, my own experience at the defence bar in the States suggest that clients take criminal proceedings much more significantly than they do civil proceedings.

My own experience at the defence bar in the United States, although admittedly anecdotal, suggests to me that the criminal sanction is the most effective in deterring cartel conduct. Companies are often targets of private litigation and the arrival of a demand letter (a letter of initiation) or service of a summons is not a very unusual event. While no company likes to be sued, companies have processes in place to manage such events. Internal assessments are done and outside counsel (probably including economic experts) are retained. Someone from the legal department will be assigned responsibility to monitor the litigation and oversee the work of retained counsel and their experts. Public disclosure obligations will be assessed. While not a welcome event, such events are sufficiently routine that they do not even come to the attention of senior management.

A criminal investigation is different. Even rumour of an antitrust grand jury sets off alarms within corporate headquarters. Unlike the commencement of civil proceedings, the service of a criminal investigative subpoena,³⁸ or—worse yet—a “raid” by special agents of the Federal Bureau of Investigation in execution of a search warrant is a very significant event. Senior management take a criminal antitrust investigation much more seriously than either private treble damage litigation or even a government civil investigation.

sanctions in light of this experience. On the other hand, these particular cartels may have been formed prior to the imposition of significant sentences in recent years. Additional study of these cases is warranted.

³⁸ Such subpoenas in the United States are issued by a grand jury. For a description of grand jury practice, see ABA Antitrust Section, 1 Antitrust Law Developments 737-47 (5th ed. 2002) [hereinafter “ABA”].

Corporations often manage their response to a criminal investigation in a very different manner from civil litigation. For example, corporate legal departments routinely demand that retained counsel prepare budgets for the management of civil litigation. They also monitor, sometimes very carefully, litigation resource allocation. It is not uncommon for retained counsel to hear: “It isn’t necessary to have two lawyers attend that hearing,” or “You don’t need not attend this deposition; we can rely on co-counsel.” A criminal investigation is altogether a different kettle of fish. Unlike civil litigation, I have seldom been asked for a budget in such a matter. Rather than question whether too many resources are being devoted to the case, one may be asked: “Are we are doing everything necessary to mount a successful defence? Is there something else we ought to do?” I am convinced that the prospect of incarceration focuses the corporate attention. This difference in attitude, while most unscientific, speaks volumes to this lawyer.

It would be surprising if it were otherwise. The author’s own experience in antitrust counselling and as defence counsel in criminal investigations suggests that most business executives, while willing to risk civil liability, are unwilling to tolerate even a small risk of incarceration. Men (and now women) whose terrain is the boardroom and country club rather than the criminal courthouse and “booking” room find the prospect of imprisonment intolerable. Whether it is the humiliation associated with a felony conviction or the loss of personal autonomy, the distaste for imprisonment cannot be underestimated.

d. Objections to custodial sentences.

There appear to be two criticisms of custodial sentences for cartel offences. First, it is argued that such penalties are inconsistent with social and legal norms. The author confesses his inability to grasp this objection. If it is only “it is just not done”, then one must inquire “why.” Presumably it is because the offence is not sufficiently serious to warrant the penalty. Yet, price fixing is theft. Antitrust enforcers to both Ireland’s east and west agree. Looking to the United Kingdom, John Vickers, Chairman of the Office of Fair Trading as stated: “Since hard-core cartels are like theft, criminalisation makes the punishment fit what is indeed a crime.”³⁹ Looking to the United States, former Assistant Attorney General Joel Klein refers to price fixers as “well dressed thieves.”⁴⁰ Do jurisdictions rejecting custodial sentences as inconsistent with social and legal norms treat fraud and other forms of “white collar” theft as insufficiently serious for custodial sentences? Viewing cartel offences as theft, the argument that custodial sentences are inconsistent with social and legal norms does not seem compelling.

Second, it is argued that the imposition of custodial sentences will create additional hurdles for prosecutors and lead to less, rather than more, deterrence.⁴¹ This criticism merits more attention. Criminal conviction requires proof beyond a reasonable doubt rather than by preponderance of the evidence in most common law jurisdictions. Moreover, there are additional safeguards against self-incrimination and higher evidentiary standards in criminal prosecutions in many jurisdictions. The costs of

³⁹ Address of O.F.T. Chairman John Vickers, Policy for Markets and Enterprise, before the British Chamber of Commerce 4, Mar. 31, 2003.

⁴⁰ Address of Ass’t Atty Gen. J. Klein before the ABA Antitrust Section Meeting, Washington, April 6, 2000.

⁴¹ The Government of New Zealand concluded that higher standards associated with criminal prosecutions would lead to fewer cases and less deterrence. See, OECD Competition Committee Working Party No. 3 Discussion Paper, *supra* note 7, at 9.

prosecution are undoubtedly higher, but the issue is whether the additional deterrence is worth the cost. Prosecutors within the Antitrust Division of the U.S. Department of Justice, with much experience satisfying these higher standards,⁴² say with one voice that it is.⁴³

IV. The compensatory objective.

a. Introduction:

Many interests may be injured as a result of cartel conduct. Although compensation is a worthy objective, the legal system does a very poor job compensating any of them. This is not for want of trying. Rather the task is one that courts are ill equipped to do.

Almost all of this discussion focuses on United States courts in their consideration of the practical issues arising in the context of private rights of action.⁴⁴ Since there has been relatively little private litigation in Ireland, it is premature to expect much adjudication of these issues. While there is no Irish law directly addressing many of these issues today, these questions will

⁴² Some will note that the conviction rate following trial of antitrust defendants in the United States and Canada leaves something to be desired. Such criticism misses the boat. Rather the comparison should take into account the number of guilty pleas since one would normally expect only the toughest cases to go to trial.

⁴³ Another objection is that monetary penalties are relatively costless to employ and return monies to the exchequer while custodial sentences impose costs on the exchequer. But this is only to suggest that monetary sanctions ought be preferred over custodial sanctions given the same level of deterrence. The problem in this context is that fines at current levels do not deter and that effective increases are not politically feasible.

⁴⁴ Although there have been relatively few private rights of action under Section 14 of the Competition Act, 2002 in Ireland, there has been a huge amount of litigation under Section 4 of the Clayton Act in the United States. While the litigious nature of America is doubtless a partial explanation, much of the U.S. private litigation “piggy-backs” on the government investigations and prosecutions. In part this is because the government has identified cases for the private bar, but it is also due to a statutory presumption of significant benefit to plaintiffs. The Clayton Act, as amended, permits mandatory collateral estoppel be given to antitrust judgments obtained by the Department of Justice. Even in situations where this does not apply, a judgment may be entitled to *prima facie* evidence against the defendants in a subsequent private action. See generally ABA 1001-07. Other aspects also foster private rights of action and include permissive class actions, contingency fees, rejection of *in pari delecto* defences, joint and several liability, lack of contribution, asymmetrical assessment of costs on to winning plaintiffs and, of course, treble damages.

inevitably confront Irish judges. Whether they are influenced by American cases remains to be seen.⁴⁵ But one thing is certain; the issues will arise.

- b. Unidentifiable victim: the injury to the economy by virtue of the misallocation of resources.

Unquestionably there are costs associated with the output that the monopolist (or cartel) does *not* produce, but which would be produced in a competitive environment. As a result of a cartel (or monopoly) the market receives distorted signals, and an inefficient mix of goods or services is produced.⁴⁶ X-inefficiencies associated with monopoly may also impose costs.⁴⁷ These costs to society are real, but we do not even pretend to compensate for them.⁴⁸ The U.S. Supreme Court addressed these issues obliquely in Hawaii v. Standard Oil Co. and concluded that a state could not seek compensation for losses to its economy generally.⁴⁹ Injury—yes; recovery—no.

⁴⁵ For an interesting essay on the teachings of American private antitrust enforcement for others, see Baker, “Revisiting History—What have we Learned about Private Antitrust Enforcement that we would Recommend to Others?”, 15 *Loyola L.Rev.* 379 (2004) [hereinafter “*Baker*”].

⁴⁶ Judge Posner puts it this way: “monopoly pricing confronts the consumer with false alternatives: the product that he chooses because it seems cheaper actually requires more of society’s scarce resources to produce. Under monopoly, consumer demands are satisfied at a higher cost than necessary.” *Posner 12*.

⁴⁷ X-inefficiency is the difference between behaviour implied by economic theory and that observed in practice.

A firm is X-inefficient if its plants are not operating on a short-run average cost curve that is tangent to the minimum long-run average cost curve. Under X-inefficiency a given bundle of inputs produces less than the maximum feasible output, or the cost of a fixed level of output exceeds the minimum necessary.

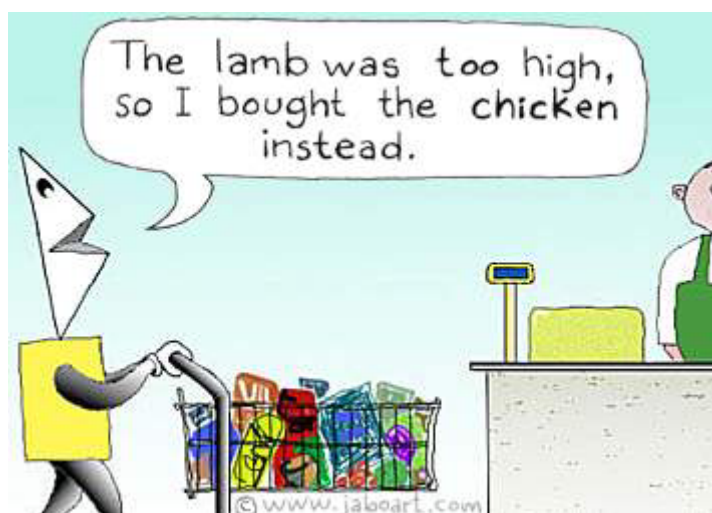
Siegfried & Wheeler, “Cost Efficiency & Monopoly Power: A Survey,” in *Economic Analysis & Antitrust Law* 49, 59 (Calvani & Siegfried eds., 2nd ed. 1988). Some sources of x-inefficiency might be over-investment in executive perks, e.g., corporate aviation, high wages and failure to innovate.

⁴⁸ Economists refer to this injury as the “deadweight welfare loss.” Interestingly, Judge Posner argues that economists generally underestimated the loss by failing to recognize the losses associated with the resources expended to secure and maintain market power. See Posner, “The Social Costs of Monopoly and Regulation,” 83 *J.P.E.* 807 (1975) and *Posner* 9-32. See also Tullock, “The Welfare Costs of Tariffs, Monopolies, and Theft,” 5 *Western Econ.J.* 224 (1967); Calvani, “Mr. Posner’s Blueprint for Reforming the Antitrust Laws,” 29 *Stan. L.Rev.* 1311 (1977).

⁴⁹ 405 U.S. 251 (1972).

c. Primary victims: Those who did not buy at the anticompetitive price.

The primary victims are those who did not buy because the cartel price was above their reserve price. The costs of identifying these buyers would be prohibitive, and no one favours attempting to do so. No effort is made to



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identify them, and the author could not find a case where the plaintiff even tried.⁵⁰ Again, it is just too hard.

d. Secondary victims: Those who bought at the cartel price.

Given the impossibility of identifying the primary victims, we devote our attention to those secondary victims who bought at a price equal to or less than their reserve price. They are injured, but they are less injured than the primary victims who were not even able to make the purchase. But even here we do not do a particularly good job in compensating the injured.

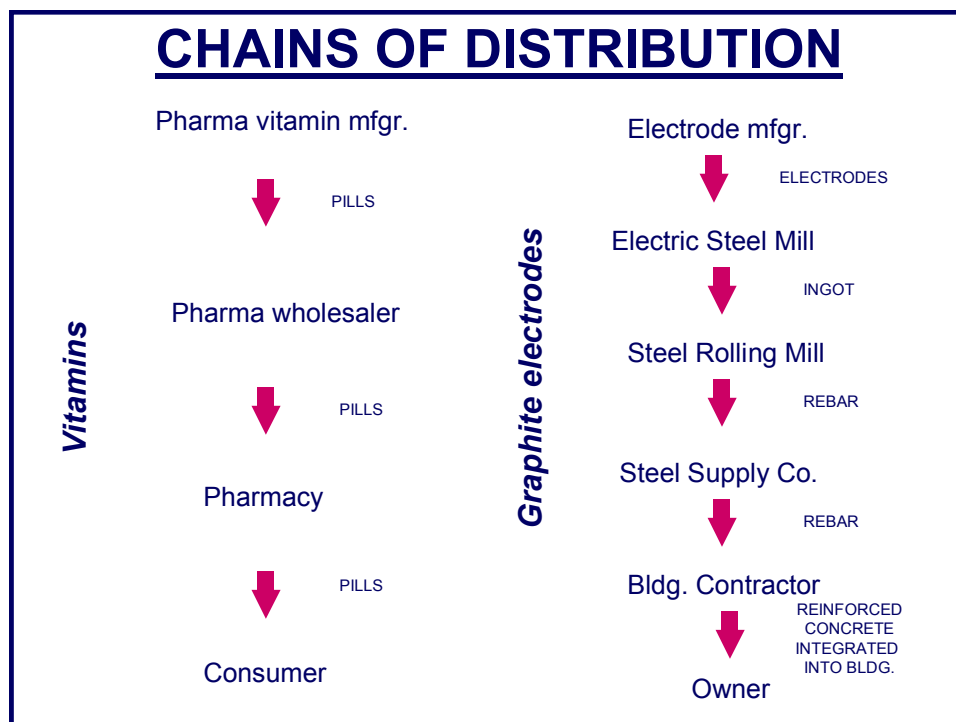
Most cartels occur in industries where there are multiple tiers of distribution. For example, there may be several tiers in the distribution chain between the manufacturer and the consumer. Should the directly purchasing

⁵⁰ Connor and Lande confirm that there has never been a case where such damages have been awarded a successful plaintiff. Connor & Lande, note 8, *supra*, citing Hjermfelt & Strother, "Antitrust Damages for Consumer Welfare Loss, 39 *Clev. St. L.Rev.* 505 (1991).

wholesaler, the intermediate jobber, the retailer or the consumer be able to recover? Obviously it depends on whether the overcharge was passed on from seller to buyer, etc. Often this is not an easy inquiry.

While a difficult task when the product is simply sold from one distributor to another, it becomes much more complicated when the price-fixed good is

Diagram B



incorporated into another product that is then sold to another buyer. *Diagram B* compares the distribution channels of vitamins, which may undergo very little change, and graphite electrodes used by electric steel mills to melt scrap. In the latter case, tracing the overcharge could be an incredibly complicated undertaking. Obviously the task becomes easier to the extent that cost-plus contracts are prevalent in the industry.

This problem confronted the United States federal courts until the issue was resolved by the Supreme Court in Illinois Brick v. Illinois.⁵¹ Previously in

⁵¹ 431 U.S. 720 (1977).

Hanover Shoe v. United Shoe Mach. Corp.,⁵² the Court had held that a defendant seller cannot argue that a plaintiff buyer passed on the overcharge to its customer and therefore suffered no injury.⁵³ In Illinois Brick the Court held that a plaintiff buyer who purchases from an innocent reseller may not sue the manufacturer who had illegally fixed prices.⁵⁴ Taken together these two decisions stand for the proposition that only the direct-purchaser can maintain an action for damages.

In reaching this result the Court was influenced by three factors. First, it was concerned about duplicative recovery. Given that Hanover Shoe precludes a defendant from asserting a passing-on defence against a direct purchaser, suits by indirect purchasers presents opportunities for duplicative recovery. Second, and perhaps more importantly—it reasoned that the administrative costs associated with identifying, measuring and apportioning injury were tasks that the courts were ill equipped to do. Lastly, the Court thought that increasing the costs of litigation and the diffusion of damages might diminish the incentive to sue and reduce the effectiveness of treble damages as a deterrent. Accordingly, the Court adopted an arbitrary rule generally permitting only direct purchasers to recover because of the administrative costs associated with a more accurate allocation.⁵⁵

⁵² 392 U.S. 481 (1968).

⁵³ The Court did acknowledge that while “normally an insurmountable” task, *supra* at 493, there may be cases where the defendant could invoke the “passing-on” defence, *e.g.*, where the overcharged buyer had a pre-existing cost-plus contract.

⁵⁴ As with Hanover Shoe, the Court admitted exceptions to the rule, *e.g.*, cost-plus contracts. *See generally* ABA 855-61.

⁵⁵ In contrast, many state courts permit indirect purchasers to recover. *See generally* ABA 811-12. *See* Baker, “Hitting the Potholes on the *Illinois Brick* Road,” *Antitrust* 14 (Fall 2002), for a discussion of the “*Illinois Brick* Repealer Statutes” and the issue of double-recovery. Interestingly, Baker concludes: “Only if wealth maximization for trial lawyers—both plaintiffs’ and defendants’ trial lawyers—were the goal of national antitrust policy could the society have designed the wonderfully random system that we have for redressing antitrust wrongs and compensating victims in the wake of

If it would be difficult to identify, measure and apportion injury when there are multiple tiers of distribution of the same product, these problems are considerably magnified when the price-fixed good is used as an input in the manufacture of other products. Whether Illinois Brick was rightly decided is the subject of debate, but it is clear that compensation of secondary victims poses difficult issues.⁵⁶

e. Tertiary victims.

Others can be injured as a result of a price fixing conspiracy. These might include a supplier to the cartel who is injured as a result of decreased sales associated with the reduction in output. Consider, for example, an employee of a janitorial service that provided services to the cartel and who is rendered redundant by virtue of the defendant's cutback in production. Assuming that the plaintiff can establish a causal link, should the unemployed janitor be able to recover?

Both the American Clayton Act and the Irish Competition Act, 2002 would seemingly permit anyone who could prove causation to sue.⁵⁷

Obviously the list of potential plaintiffs could be immense. Despite the terms of the U.S. law, the courts have cut back on the ability of parties to sue.

[the case law]." *Supra* at 17 [citations omitted]. Opponents of the Illinois Brick approach have unsuccessfully sought federal legislation that would overturn the Supreme Court's decision.

⁵⁶ Although deterrence was considered separately above and actions for damages have been considered only in the context of the compensatory interest, it should be noted that private rights of action do not appear effective deterrents. In the vitamins cartel, for example, "the total antitrust fines *and* penalties are reckoned to be between \$4.4 and \$5.6 billion. But...the best estimates of the cartel's monopoly profits...are \$9 to \$13 billion." Connor, Extraterritoriality of the Sherman Act and Deterrence of Private International Cartels 15 (*forthcoming*) [emphasis added]. While patently inadequate, the number is even more puny when the probability of detection/punishment is considered.

⁵⁷ Section 4 of the Clayton Act provides: "any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue...and recover threefold the damages by him sustained..." 15 U.S.C. § 15(a). Section 14 (1) of the Competition Act, 2002 provides: "Any person who is aggrieved in consequence of any agreement, decision, concerted practice or abuse which is prohibited...shall have a right of action..."

Confronted with a myriad of potential plaintiffs, U.S. courts have imported proximate cause-type concepts from the common law of torts, *e.g.*, remoteness, to limit the ambit of recovery.⁵⁸ In Associated Gen. Contractors v. California State Council of Carpenters,⁵⁹ the U.S. Supreme Court explicitly qualified the seemingly expansive language of the statute. Proof of causation is necessary, but insufficient. Remoteness is relevant.⁶⁰

f. Other limitations.

“*Antitrust injury*”-- U.S. courts have imposed other limitations on the ability of plaintiffs to recover. In Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.⁶¹ the United States Supreme Court further curtailed the scope of liability when it stated that the plaintiff must demonstrate “antitrust injury” which it defined as “injury of the type the antitrust laws were intended to prevent.”⁶² The facts of the case best illustrate the principle. There plaintiff bowling centres sought damages resulting from the defendant’s acquisition of a failing competitor.⁶³ Plaintiffs argued that “but for” the illegal acquisition of the centre, it would have failed and plaintiffs would not have had to compete with those bowling

⁵⁸ For example, can a buyer who purchases from non-conspiring seller sue vendors from whom it did not purchase where it can demonstrate that other vendors had formed a cartel and that the non-conspiring seller was able to price somewhat higher than the competitive price because of the absence of price competition in the marketplace? The U.S. decisions are split on this issue. Compare Mid-West Paper Prods. Co. v. Continental Group, 596 F.2d 573, 587 (3d Cir. 1979) [standing denied] with In re Beef Indus. Antitrust Litig., 600 F.2d 1148, 1166 n.25 (5th Cir. 1979), *cert. denied*, 449 U.S. 905 (1980) [standing granted].

⁵⁹ 459 U.S. 519 (1983).

⁶⁰ See generally *ABA* 861-66 for a discussion of the relevant factors considered in this analysis.

⁶¹ 429 U.S. 477 (1977).

⁶² *Supra* at 481.

⁶³ If the acquired entity was failing (as the Court assumed it was), why would the Failing Company Defence not insulate the transaction at issue from liability? The answer is that the Defence is difficult to successfully invoke. In addition to proving that the company is failing and incapable of reorganisation in bankruptcy, the failing company must establish that it has conducted a search and that there are no less anticompetitive alternative purchasers available willing to purchase at the liquidation value plus something. For a description of the Failing Company Defence, see *ABA* 348-51. The Irish treatment of failing companies is very similar. See The Competition Authority, Notice in Respect of Guidelines for Merger Analysis 26-27, Decision No. N/ 02/004 (Dec. 16, 2002) at www.tca.ie.

lanes. The Court assumed that the acquisition was illegal under Section 7 of the Clayton Act⁶⁴ and that plaintiffs' damages resulted from the illegal acquisition.

Rejecting plaintiff's case, the Court reasoned that it would be improper to permit recovery of money damages predicated on the reduction of competition associated with the centre's exit from the market. Such a result would be to turn antitrust on its head. Thus despite injury caused by conduct assumed to be illegal, plaintiff is shown the door.⁶⁵

Exemplary damages & prejudgment interest-- The Competition Act, 2002 provides that that the court may award successful plaintiffs exemplary damages.⁶⁶ The author is unaware of any case in which such damages have been awarded in Ireland. The United States, by contrast, provides for mandatory "treble damages"⁶⁷ leading most to conclude that the statute contemplates exemplary damages as a matter of right. The rationale for this provision is unclear, but it is generally thought that Congress sought to create a bounty that would encourage injured parties to seek legal redress.⁶⁸ In some sense Congress sought to privatise enforcement back in 1889. Given the fact that most of the significant private litigation today are "follow on

⁶⁴ 15 U.S.C. § 18. This provision proscribes mergers and acquisitions where "the effect of such...may be to substantially lessen competition...."

⁶⁵ The so-called Brunswick Doctrine merits more attention than can be given here. *See generally*, ABA 844-50; see also Calvani, "The Brunswick Doctrine," 50 *Antitrust L.J.* 319 (1982).

⁶⁶ Section 14 (5)(b).

⁶⁷ There are a few exceptions to this general rule. For example, entities that have registered as joint research and development joint ventures are subject to single damages. National Cooperative Research & Production Act of 1984, Pub. L. No. 98-462, Stat. 1815, (codified at 15 U.S.C. §4301-05). Recently, legislation has been introduced that would limit recovery against entities granted immunity under the Antitrust Division's immunity programme to single damages.

⁶⁸ Apparently Congress looked to the Statute of Monopolies of 1623, which provided treble damages and double costs to the injured party. *Baker* 379. But there is little else as to why Congress believed treble damages to be appropriate.

cases” in the wake of successful government criminal prosecutions, the justification for this bounty is open to question.

There is some evidence, however, that the remedy *as applied* does nothing more than compensate for actual damages. Federal law does not generally provide for prejudgment interest on antitrust awards.⁶⁹

Investigators, after examining series of awards, have concluded that once the time-value of money is considered, damage awards only compensate for actual damages and do not contain an exemplary element.⁷⁰

Although Irish courts have not considered these issues to date, it is important to recognize that the subject of exemplary damages cannot be seriously considered in the absence of the treatment of prejudgment interest.⁷¹

⁶⁹ Interest is awarded from the entry of judgment until payment. 28 U.S.C. § 1961. A court may order payment of interest from the date of the service of the complaint until entry of judgment under certain circumstances. 15 U.S.C. § 15a (2000). These requirements focus on whether the plaintiff engaged in dilatory tactics during the course of the litigation. In no event can plaintiff recover interest arising from the date of the injury.

⁷⁰ See Parker, “The Deterrent Effect of Private Treble Damage Suits: Fact or Fantasy,” 3 *N.M.L.Rev.* 286 (1973), Parker, “Treble Damage Action: A Financial Deterrent to Antitrust Violations,” 16 *Antitrust Bull.* 483 (1971) and Lande, “Are Antitrust ‘Treble’ Damages Really Single Damages,” 54 *Ohio St. L.J.* 115 (1993)

⁷¹ Donald Baker would add a good number of other issues to this list. They would include the shifting of costs in favour of the prevailing party, joint and several liability and rights of contribution, the use of criminal judgments as prima facie evidence of liability in civil proceedings, and the propriety of arbitration to name a few. *Baker* 380-81.

V. Conclusion.

The Oireachtas has proscribed cartel behaviour in Ireland. From a remedial perspective, it has sought to deter such conduct by vesting the Irish judiciary with the power to impose custodial sentences and fines for violations of the law. It has also sought to compensate injured parties by creating a private right of action. Data suggest that monetary penalties are not likely to sufficiently deter cartel conduct. Custodial sentences are much more likely to achieve this objective.

While compensation of persons injured as a result of cartel behaviour is a good idea, courts are ill equipped to accomplish this objective with much precision. Accordingly, the compensatory objective is less important than deterrence.

In the end we have a mix of deterrence and compensation objectives, but precious little case law in Ireland. Whither we go, *is maith an scéalaí an aimsir*.