Introduction

0.1 Cartels and calls for their criminalisation

As a means of industrial organisation, cartels have had mixed acceptance in Europe after the end of the Industrial Revolution. In the late nineteenth century there were approximately four industry-wide cartels operating in Germany. By 1923, the figure had grown to over 1,500.[1] Such organisations were a common, legal and (often) encouraged means of facilitating industrial and national development. However, by the end of the twentieth century, this complacent attitude had changed, and the European authorities were sanctioning cartel activity with apparently significant fines, some in the hundreds of millions of Euros.[2]

In contrast, on the other side of the Atlantic, the American position has apparently never wavered: since before the passage of the Sherman Act in 1890, politicians (at both the state and Federal level), economists and public opinion viewed cartel activity as a form of anti-competitive exploitation, which harmed consumers. As such, this activity was condemned by public sentiment, and later by law. In addition to criminal penalties, that Act was to provide treble damages for those harmed by such activity, and the ability to obtain legal costs (a rare procedural concession in American law). The latter half of the twentieth century in America witnessed a gradual increase in the penalties available to be (and actually) imposed on those participating in these sorts of activities. In contrast to the European system, the American system – from the beginning – imposed personal, criminal sanctions against those involved in cartel activity. While criminal sanctions were little used until the very late years of the twentieth century, the increase in penalties for breaches of the Sherman Act generally translated into an

1 This will be brought out in our discussion in Chapter 4, below.
2 For a historical account of cartels in Europe describing, *inter alia*, their pervasive nature, see Gerber, *Law and Competition in Twentieth Century Europe*, and Harding and Joshua, *Regulating Cartels in Europe*; on history of cartels and cartel control in the UK, see Mercer, *Constructing a Competitive Order*. For an American perspective, see Peritz, *Competition Policy in America*.

increase in individual penalties. The result is that people do go to Federal prisons for this activity on a frequent basis.

The justification for imprisonment is that hard-core cartel activity has a 'harmful' effect on consumers. If it were not controlled in this manner, it would become more pervasive, inflicting even greater harm on the public. Although any estimate of the extent of cartel conduct is necessarily imprecise,[3] it is clear that cartels are pervasive. In Europe, Neelie Kroes, when European Union (EU) Competition Commissioner, likened cartel activity to theft, claiming that cartels 'rip-off consumers'.[4] In this regard, one influential British scholar has remarked:

> However, if competition policy is about one thing, it is surely about the condemnation of horizontal price-fixing, market-sharing and analogous practices: on both a moral and practical level, there is not a great deal of difference between price-fixing and theft.[5]

Similar views are expressed by the Antitrust Division of the US Department of Justice:

> Price fixing, bid rigging, and market allocation are economic crimes with potentially devastating effects on the U.S. economy. Such crimes rob purchasers, contribute to inflation, destroy public confidence in the economy, and undermine our system of free enterprise.[6]

This is not merely a transatlantic phenomenon. Such opinions have also been expressed by influential international organisations such as the Organisation for Economic Co-operation and Development (OECD)[7] and the World Trade Organization (WTO).[8]

[3] This imprecision is a direct consequence of attempting to measure illegal (and hence clandestine) activity.
[4] Kroes, 'Tackling Cartels – A Never-ending Task'.
[5] Whish, 'Recent Developments' 220. [6] DOJ, *Antitrust Primer* 1.
[7] OECD, *Hard Core Cartels* 8:

> Cartels harm consumers and have pernicious effects on economic efficiency. A successful cartel raises price above the competitive level and reduces output. Consumers (which include businesses and governments) choose either not to pay the higher price for some or all of the cartelised product that they desire, thus forgoing the product, or they pay the cartel price and thereby unknowingly transfer wealth to the cartel operators. Further, a cartel shelters its members from full exposure to market forces, reducing pressures on them to control costs and to innovate. All of these effects harm efficiency in a market economy.

[8] WTO, *Provisions On Hardcore Cartels*, para. 7:

> [H]ardcore cartels are the most pernicious type of anti-competitive practice from the point of view of trade and development as well as of

To combat the pervasive nature of cartels, commentators and legislators have proposed the use of criminal sanctions. In the United States, cartel activity has been a criminal offence since 1890.[9] In Europe, Ireland,[10] the United Kingdom,[11] Estonia[12] and (to some extent) Germany[13] criminalise this sort of behaviour. Although the EU's Competition Commission metes out (apparently) substantial fines to those undertakings caught engaging in cartel behaviour,[14] some academic commentators have suggested that these monetary penalties are insufficient and need to be supplemented by criminal sanctions which include incarceration to effectively deter such activities.[15] Jurisdictions outside of the EU and North America are beginning to incorporate criminal sanctions for anti-competitive activities into their legal regimes.[16] Indeed such incorporation has the support of the WTO, whose Working Group on the Interaction between Trade and Competition Policy remarks:

> Important elements of an effective national competition law include a clear prohibition of cartel activity, backed up by substantial penalties including fines and/or imprisonment, and relevant investigatory powers. Furthermore, the suggestion has been made that particular attention should be devoted by relevant enforcement authorities to the investigation and prosecution of domestic and international cartels, given the clear anti-competitive effects of these practices and their harmful impact on the development prospects of poor countries.[17]

> competition law enforcement; that they can have the effect of undermining the benefits that should flow from international trade liberalization, and hence are an important concern for the multilateral trading system; that they impose heavy costs on consumers and user industries, and thereby also on the development prospects of poor countries; . . .

9 Sherman Act §§ 1–7; Clayton Act §§ 12–22, 52–53.
10 Competition Act 2002, ss. 4–8. 11 Enterprise Act 2002, ss. 188–190.
12 See Proos, 'Competition Policy in Estonia', in Cseres, Schinkel and Vogelaar (eds.) *Criminalization of Competition Law Enforcement* 307.
13 German criminal law prohibits bid rigging: see Vollmer, 'Experience with Criminal Law Sanctions for Competition Law Infringements in Germany', in Cseres, Schinkel and Vogelaar (eds.), ibid. 257.
14 In 2010 alone, the Commission imposed fines in excess of €3 billion for TFEU Article 101 (cartel) violations. See the Commission's website, 'Cartel Fines'.
15 See the articles contained in Ehlermann and Atanasiu (eds.), *European Competition Annual 2006*, Cseres, Schinkel and Vogelaar (eds.) (n. 12); and Wils, *Efficiency and Justice* 155–201.
16 See OECD, *Hard Core Cartels: 2000*, Annex A for an enumeration of sanctions against hardcore cartels on a member-by-member basis.
17 WTO (n. 8) para. 126.

However, these calls for criminalisation are themselves not unproblematic. Criminal laws are of a *sui generis* nature.

By threatening loss of property or liberty, criminal sanctions are a legal order's most coercive mechanism for regulating the conduct of those within its jurisdiction. Additionally, the criminal law and its sanctions carry a non-trivial element of moral (or normative) force, with its higher standards of proof and its inquiry into the defendant's mental state which bears upon the defendant's culpability. The coercive nature of the use of criminal sanctions and their purported moral content requires some normative justification for its use. The reason is fairly clear: to deprive someone of their property or liberty requires a reason; otherwise there is apparently little difference between the state and the kidnapper or burglar.[18] Likewise, it is a fair retort to anyone who expresses moral indignation regarding certain behaviour to ask them to justify their condemnation.

However, at this point it is necessary to clarify what is meant by a 'cartel' and by the sorts of harm that these arrangements cause. Clarifying these two points ensures precision in our subsequent discussion.

0.2 Cartels and their effects

0.2.1 Defining cartels

When one attempts to define certain activities for analytic purposes, one is often faced with problems of vagueness or indeterminacy. Every definition should identify (or select) paradigmatic cases which ought to be included from those which ought to be excluded; however, there may be a so-called 'grey' area, of doubtful or marginal cases. The phrases used in competition law such as 'anti-competitive practices' or 'improving the production or distribution of goods' are not exceptions to this general rule. To illustrate this, an agreement among manufacturers of, for example, elevators to allocate customers and coordinate bids on construction projects[19] would certainly be picked out by any adequate definition of the two terms. However, it is not clear that an agreement of a manufacturer

[18] Indeed, a similar criticism of e.g. John Austin's positivism is often voiced: Austin, *The Province of Jurisprudence Determined* (192–3). The best-known critic of Austin on this basis is Hart, 'Positivism and the Separation of Law and Morals', 48, 50.

[19] *Elevators and Escalators* (Case COMP/E-1/38.823).

of, for example, bicycles[20] or leather products[21] with its retailers to maintain a required minimum retail price, does (or should) fall within the same definition.

Indeed the indeterminate nature of the subject can be seen from legal instruments which define the subject matter of a jurisdiction's competition regime. In the EU, Article 101 of the Treaty on the Functioning of the European Union (TFEU) proscribes five activities (price-fixing, controlling output, market sharing, the imposition of dissimilar trading conditions to effect a competitive disadvantage, and tying). Yet two paragraphs later, the TFEU exempts some practices which, 'contribute to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit'.[22]

In the US, the Sherman Act speaks only of 'combination[s] in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce' and 'monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce'.[23] Similar imprecision can be found in the statutes of, *inter alia*, Canada,[24] Ireland,[25] France[26] and Germany.[27]

However, this imprecision (or indeterminacy) is not fatal to most legal exercises, and, in particular, not to ours. Assuming a statute (or other defining provision) passes appropriate initial jurisdictional or constitutional tests for lack of vagueness,[28] so-called 'grey areas' can be clarified through the use of other hard and soft law instruments such as subordinate regulation, directives, policy manuals, and the like.[29] And in the end, administrative tribunals and/or courts are positioned to make final clarifications when necessary.

With this in mind, our immediate concern is with the central areas of anti-competitive conspiracies, the so-called 'hard-core cartels', the prohibition of

[20] *US* v. *Arnold, Schwinn and Co. et al* 388 US 365, 87 S Ct 1856 (1967).
[21] *Leegin Creative Leather Products Inc* v. *PSKS Inc d b a Kay's Kloset and Kay's Shoes* 551 US 877, 127 S Ct 2705 (2007).
[22] TFEU Article 101(3). [23] Sherman Act §§1–2.
[24] Competition Act RSC 1985, s. 45. [25] Competition Act 2002, s. 4.
[26] *Code de Commerce*, Article L 420–1.
[27] *Gesetz gegen Wettbewerbsbeschränkungen (GWB)* (Act against Restraints of Competition, ARC) § 1.
[28] See, for example, *City of Chicago* v. *Morales* 527 US 41, 119 S Ct 1849 (1999) which determined that a city ordinance prohibiting 'criminal street gang members' from 'loitering' in public places was too vague to provide adequate notice of expected conduct.
[29] International Competition Network, *Defining Hard Core Cartel Conduct* 10–11.

which is an essential element of every competition regime. These practices are easily described.[30] The International Competition Network's (ICN's)[31] observations on this point are worth noting in detail:

> Reflecting the widespread consensus, the basic statutory elements that define a hard core cartel are remarkably consistent across jurisdictions. The three common components of a cartel are:
>
> 1) an agreement;
> 2) between competitors;
> 3) to restrict competition.
>
> The **agreement** that forms a cartel need not be formal or written. Cartels almost invariably involve secret conspiracies. The term **competitors** most often refers to companies at the same level of the economy (manufacturers, distributors, or retailers) in direct competition with each other to sell goods or provide services. The aspect of a **restriction on competition** distinguishes conduct that targets open competition from benign, ordinary course of business agreements between firms.
>
> Further, in describing the typical types of hard core conduct, four categories of conduct are commonly identified across jurisdictions:
>
> price fixing;
> output restrictions;
> market allocation; and
> bid rigging.
>
> In some jurisdictions, bid rigging and output restrictions are also sometimes regarded as subsets of price fixing and/or market allocation, as the impact is to affect pricing on bids or by reducing output or to assign or divide certain contracts or market share between competitors. Regardless of the specific categorization, the categories all have in common conduct whereby competitors fix an aspect of a free market.
>
> Conduct falling within the four categories can take many forms.[32]

In sum, participants in hard-core cartels agree to insulate themselves from the rigours of a competitive marketplace, substituting cooperation for competition.[33]

[30] Though, to be fair, may be difficult to observe, detect or otherwise identify in the market; for methods of determining whether collusion exists, see e.g. Porter, 'Detecting Collusion' 147 and OFT, 'Predicting Cartels'.
[31] The ICN is an international organisation comprised of national and international competition agencies with the mandate of assistance in the coordination of competition policy and enforcement.
[32] International Competition Network (n. 29) 10, emphasis in the original.
[33] See Case T-25/95 *Cimenteries CBR* v. *Commission* [2002] ECR II-491, at para. 22, where the court notes, 'The concept of a concerted practice refers to a form of coordination

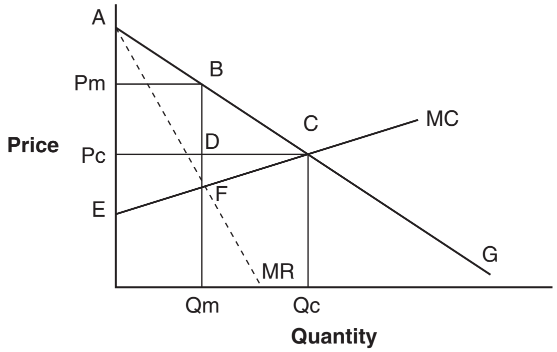

Figure 1 Welfare losses from monopoly

0.2.2 The economic effect of cartels

The effect that such cooperative agreements have is to allow the cartelists to act in the market as if they were divisions of a single monopolist, replacing competition with coordination. The classical microeconomic analysis of monopolies makes these effects apparent.

In classical economic theory, the price of a good falls as a greater quantity of the good is produced. This is graphically represented by the industry price curve (line AG) in Figure 1. The industry cost curve (MC) is represented by the line EC, through point F. In a competitive market, firms are 'price takers' (i.e. the market conditions set the price which firms are able to charge), the quantity of goods produced (Q_c) will be at the intersection of the industry price and cost curves (lines AG and MC, respectively), resulting in a competitive price (P_c).

A monopolist (or a cartel acting as a monopolist) is a 'price setter', (or 'price maker'), that is it determines the price it can obtain for its good by reducing production. Production is determined by marginal revenue (MR), and the quantity of goods produced under a monopoly (Q_m) is determined by the intersection of the marginal revenue and marginal cost curves (MR and MC, respectively) represented by point F on Figure 1. This restriction in production (i.e. $Q_m < Q_c$) entails that the price of a good under monopoly (P_m) is greater than the price under

between undertakings which, without having been taken to the stage where an agreement properly so-called has been concluded, *knowingly substitutes practical cooperation between them for the risks of competition.*' (Emphasis supplied.)

competition (P_c). Accordingly, consumers pay more for the goods under monopoly than in a competitive marketplace.

Figure 1 graphically illustrates the welfare losses from monopolies (cartels). First, there is a loss of consumer surplus. Consumer surplus is the difference between the maximum one would pay (reservation price) and the amount one actually pays for a good. Put in crude psychological terms, this entails that the greater the consumer surplus, the greater the satisfaction in 'getting a bargain'. Producer surplus is the supply side corollary of consumer surplus, i.e. the difference between price obtained by the producer and its cost. In Figure 1 this is represented by triangle P_cEC.

Since the monopoly price is greater than the competitive price, consumer surplus is reduced. This is illustrated in Figure 1, in which the triangle AP_cC represents consumer surplus under competitive conditions. By raising the price to the monopoly price, P_m, consumer surplus is reduced to the area of triangle AP_mB. The area of P_cP_mBD represents consumer surplus which under monopoly has been appropriated by the monopolist, adding to producer surplus. The producer surplus under monopoly is represented by the area of P_mBFE.

The second welfare reducing consequence of monopolies is a creation of deadweight loss. Since the monopoly price exceeds the competitive price ($P_c < P_m$), consumers whose reservation price (willingness to pay) is above the competitive price but below the monopoly price will forgo purchasing the good, leaving an otherwise unsatisfied demand. This deadweight cost to society[34] is represented by the area of triangle BCD in Figure 1.

Posner has argued that additional welfare reducing consequence of monopolies is that any additional profit obtained from monopoly will be dissipated in an attempt to realise and maintain the monopoly position.[35] Graphically put, the area represented by P_mP_cDB is the additional gain obtained by the monopolist. Accordingly, it is cost effective for the monopolist to expend this amount to acquire and maintain its position.[36] This expenditure is dissipated through lobbying efforts of governmental bodies to obtain and protect (e.g. through tariffs, lobbying efforts to ensure licences are denied to others, etc.) the exclusivity (licence, etc.) required by the monopoly. Though Posner's analysis does not consider the case of

34 It is sometimes termed the 'social cost of monopoly'.
35 Posner, 'The Social Cost of Monopolies and Regulation'.
36 In the case of a prospective monopolist, the rational expenditure is the return (the area represented by P_mP_cDB) multiplied by the probability of obtaining the monopoly.

cartels, cartels would have additional expenditures of avoiding detection and securing the compliance of their members.

In addition to these welfare losses, monopolies are a source of social loss through two sorts of productive inefficiencies.[37] The first sort, reduced product innovation, is a greater problem with cartels than monopolies. Though impossible to demonstrate graphically, the intuition behind this claim is that, due to the explicit agreement of non-competition and profit guarantees among cartelists, any incentive to improve one's product is removed. Further, given that innovation would require the expenditure of research and development costs (which would be unnecessary due to a cartel-wide agreed 'stand-still' on innovation), such investment would not be undertaken. Since the monopolist, unlike the cartelist, must be concerned with other firms developing goods which may be less expensive substitutes for its goods, the monopolist may have greater incentive for research and development expenditure. Thus, these social costs of reduced product innovation may be greater with cartels.

The second sort of social costs, those associated with reduced innovation in productive processes, have a similar intuitive explanation. Given the incentives, just as there is no incentive for cartelists to invest in research aimed at improving their product, there is a similar disincentive to make a corresponding investment in improving (i.e. more efficient) methods of production. Again, and for the same reasons, the incentives for such investment may be less for cartel participants than monopolists. (However, given that the monopolist is the sole producer of the monopolised good, it has less an incentive to develop efficiencies in the production of the good, than to prevent its customers from switching to substitute goods.)

Graphically, these costs are illustrated in Figure 2. Since the monopolist (and by extension, cartelist) operates less efficiently, its cost curve will be greater. In Figure 2, this increased cost curve is MC'. Since the monopolist sets its production so that marginal costs equals MR (marginal revenue), the intersection of MC' and MR will be 'up and to the left' of the intersection of MC and MR. Since the quantity produced determines the price, under (this inefficient) monopoly, the price will be the new P_m'. Had the monopolist acted as a 'price taker' under this new cost curve, the market price would have been P_c'. The area defined by points XBDP$_c$P$_c$'Y in Figure 2 illustrates this social loss.

[37] My analysis here is based on Motta, *Competition Policy* 45–51.

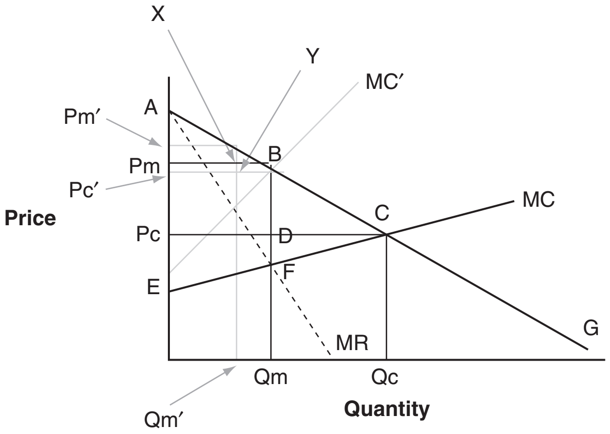

Figure 2 Loss from productive inefficiency

Productive inefficiency (of both products and processes) is related to, if not a manifestation of, Leibenstein's X-inefficiency,[38] or 'managerial slack'. This is the manifestation of a desire for a 'quiet life', removed from competitive pressures. The difference in the interests of owners (shareholders) and management gives rise to this. Motta notes:

> Shareholders care about profits, but managers care about their individual utility, determined by wage, career prospects, as well as the level of effort and time they have to put into the job. The manager might also care about profits (typically, the shareholders will write a contract where his remuneration increases with the firm's profits), but in general he will care about other things, too. As a result, when he takes decisions about technologies (or he has to take actions, which affect the firm's costs) he might not have the right incentives to adopt the most efficient ones (that is, those which maximize profits).[39]

And in collusive industry structure which guarantees a super-competitive profit, there is every incentive not to make waves.

Related to these points are two additional socio-economic concerns with monopoly (and cartels). First, though an empirical point, competitive industries are more productive.[40] Second, there is a quasi-Darwinian argument to the effect that the anti-competitive effects

[38] Leibenstein, 'Allocative Efficiency'. [39] Motta (n. 37) 47.
[40] See, ibid., 48 where Motta reviews the empirical evidence.