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ANTITRUST ENFORCEMENT REGIMES: FUNDAMENTAL DIFFERENCES

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Antitrust Enforcement Regimes: Fundamental Differences

Keith N. Hylton*

August 2012

Abstract: Since China has modeled its antitrust regime on that of the EU, there are essentially two antitrust regime types: the U.S. and the EU. This chapter is a brief comparative study of the two regimes. I focus on three categories in which fundamental differences are observed: enforcement, legal standards, and procedure. Within each of the three categories, I narrow the focus to a specific illustrative feature. With respect to enforcement, the EU imposes gain-based penalties while the U.S. imposes harm-based penalties. In predation law, the U.S. has a marginal cost standard and the EU has an average cost standard. With respect to procedure, the U.S. is a common law system, while the EU's procedure is closer to the civil law system in its allocation of power between the courts and the enforcement agency. These differences have profound implications for the welfare consequences of global antitrust enforcement.

* Boston University, knhylton@bu.edu. I thank Danny Sokol for helpful comments. Adam Mayle provided excellent research assistance. This is a forthcoming chapter in Roger D. Blair and D. Daniel Sokol, *Oxford Handbook of International Antitrust Economics* (Oxford University Press).

There are more than 100 antitrust enforcement regimes around the world (see, e.g., Hylton n.d.). Because of this, it is difficult to say much about antitrust statutes globally without running into the difficulty that such large numbers immediately imply for comparative projects. Comparisons are possible on a global scale, but they are necessarily limited to statistical summaries of the major features of the enforcement regimes.¹

In spite of the large number of antitrust enforcement regimes, there are three that are recognized as extremely important in global commerce: the U.S., the EU, and China.² Moreover, China has modeled its antitrust law regime on that of the EU (Farmer 2010, 35-36). Given this, there are essentially two antitrust regime types that dominate global commerce: the U.S. and the EU.

This chapter is a brief comparative study of the two major antitrust regimes. Even limiting my study to two competition regime types, there are many details in which the two types diverge. I will not compare the regimes in terms of all of the details. Instead, I will focus on three major areas in which fundamental differences are observed: *enforcement*, *legal standards*, and *procedure*.

Within each of the three categories, I narrow the focus to a specific illustrative feature. In the enforcement category, I discuss penalty provisions. In the legal standards category, I examine predatory pricing law as a central feature illustrating fundamental differences between the two regimes. Finally, I summarize broad differences in procedure under the regimes.

With respect to enforcement, the EU and U.S. regimes differ in that the EU imposes fines that are based on the violator's gain while the U.S. imposes harm-based penalties. In predation law, the U.S. has adopted a marginal cost standard and the EU has adopted an average cost standard. With respect to procedure, the U.S. is a thoroughly common law system, while the EU's procedure is closer to the civil law system in its allocation of power between the courts and the enforcement agency. These differences have profound implications for the welfare consequences of global antitrust law enforcement.

Enforcement

The economic theory of enforcement prescribes punishment schemes that maximize society's welfare, by reducing the sum of the costs of offensive conduct and the costs of enforcement. In this part, I briefly review the theory, and use it to address core differences in the antitrust enforcement policies of the U.S. and the EU.

¹ For an empirical study of competition law enforcement regimes around the world, see Hylton and Deng 2007. For comparative analysis, Hylton and Deng group countries into regions (Europe, North America, etc.) to compare the general stance of antitrust enforcement across regions.

² The primacy of the U.S., EU, and China antitrust regimes is evidenced by the fact that news stories discussing major mergers often focus on the approval processes in these three regimes. The coverage of the Google and Motorola Mobility merger exemplifies this trend (Bartz and Chee 2012; Whitney 2012).

Optimal Enforcement Policy

The theory of optimal antitrust enforcement is traceable to Gary Becker's article on the economics of punishment (Becker 1968). Becker argued that an efficient system of punishment would seek to internalize the social costs associated with offensive conduct. Internalization is accomplished by shifting the costs suffered by victims to the offender in the form of a penalty. Becker considered the implications of his argument for antitrust, arguing that the social costs arising from antitrust violations should be internalized by those engaging in anticompetitive conduct (Becker 1968, 198-199). Later, Landes (1983) provided a more detailed application of Becker's analysis to antitrust. In the antitrust context, internalization requires the punishment authority to shift the costs suffered by consumers, in terms of monopolistic overcharges or restrictions in supply, to the monopolizing firm in the form of a penalty.

Consider the case of a firm that takes some action that enables it to gain monopoly pricing power, and at the same time generates efficiencies in production or sale. For example, the action could be a merger that creates or enhances monopoly power and at the same time generates efficiencies – say, by cutting redundant worksites. Alternatively, the action could be an exclusive dealing arrangement that forecloses a rival firm and at the same time reduces costs in the supply chain.

The economic effects of the firm's conduct can be examined in Figure 1. Before the firm takes the action, the market is competitive, with price equal to marginal cost ($p_0 = c_0$). After the firm takes the action, it gains the power to raise its price to the monopoly level p_1 . However, costs fall, as a result of the firm's action, from c_0 to c_1 .

The optimal enforcement policy in this case is to impose a penalty on the firm equal to the sum of the wealth transfer from consumers and the forgone consumer surplus, which is represented by the sum of areas T and D in Figure 1 (Landes 1983; Hylton and Lin 2010).

Why would setting the penalty equal to the sum of the consumer wealth transfer and the forgone consumer surplus ($T+D$) be optimal? The reason is that it aligns the firm's incentives with society's incentives. If the penalty is equal to the sum of the consumer wealth transfer and the forgone consumer surplus, then the firm will choose to take the monopolizing action when and only when it enhances society's wealth.

Suppose the monopolizing action generates an efficiency gain, shown by the area E in Figure 1. The firm's action is welfare enhancing for society as long as the efficiency gain is greater than the forgone consumer surplus, that is, $E > D$. The firm will choose the monopolizing action if the gain the firm gets from monopolizing is greater than the expected penalty for monopolization. The firm's gain is the sum of the transfer from consumers and the efficiency gain, $T+E$. Thus, if the penalty is equal to the sum of the

transfer and the forgone consumer surplus ($T+D$), the firm will take the monopolizing action only when it is welfare enhancing ($E > D$).³

Although I have used the terms “monopolization” and “monopolizing firm”, this analysis applies equally to cartels. If a cartel has an efficiency basis, then it will lead to an increase in price, generating a wealth transfer from consumers, and a reduction in supply costs, generating an efficiency gain. For simplicity, I will use the term “monopolizing firm” for the remainder of this paper, even in instances in which the monopolizing act is the decision by a group of firms to create a cartel.

This analysis implies that the optimal antitrust enforcement policy internalizes, to the monopolizing firm, the harm suffered by consumers. To be sure, this is the optimal policy because there is an efficiency gain resulting from the firm’s monopolizing action. If there were no efficiency gain ($E = 0$), then the optimal policy would set the penalty in order to completely deter the violator’s conduct (Becker 1968, 180; Hylton 1996, 197-198). Such a complete-deterrence penalty would have to be at least as large as the wealth transfer from consumers (Becker 1968, 198-199; Landes 1983, 656). In other words, when the firm’s monopolizing action does not generate an efficiency gain, the optimal punishment policy is complete deterrence, which is accomplished by ensuring that the firm cannot profit from monopolization.⁴ Any penalty greater than the wealth transfer (T) satisfies the complete deterrence – or, equivalently, gain elimination – objective.

Thus, there are two general approaches a punishment authority can take under an optimal punishment regime. One is to *internalize consumer harm*. The other is to *deter completely by eliminating the expected profits* from anticompetitive conduct. The internalization approach is appropriate for conduct that is either efficient or has a significant chance of being efficient. The complete deterrence approach is appropriate for conduct that is unambiguously inefficient.

I have already provided examples of monopolizing conduct that may be efficient: mergers and exclusive dealing. As for conduct that is unambiguously inefficient, the obvious example is the price-fixing agreement (Posner 2001, 39). The standard price-fixing agreement involves no efficiency motivation; it is simply an arrangement to transfer wealth from consumers to producers (see, e.g., Leslie 1993).⁵ Under these conditions, the optimal punishment policy is to set a fine sufficient to eliminate the prospect of gain from the price-fixing cartel’s actions.

In the case of a price-fixing cartel, the internalization policy still satisfies the optimal punishment goal, because the consumer harm is the same as the producers’ gain from

³ To see this, note that the firm will take the monopolizing action when $T+E > \text{penalty}$. If the penalty is equal to $T+D$, then the firm will monopolize when $T+E > T+D$, or when $E > D$.

⁴ On the distinction between internalization and complete deterrence policies, see Hylton 1998, 425-433

⁵ It is possible for a price-fixing agreement to be efficient. If the agreement is efficient, and the efficiency gains are enjoyed by the cartel, the cartel may have an incentive to continue the agreement even when faced with a damages remedy. See Becker 1968, 199 (“If . . . certain constraints of trade raise the level of economic welfare, fines could fully compensate society for the harm done, and yet some constraints would not cease, because the gain to participants would exceed the harm to others.”).

price-fixing. For this reason, Becker concluded that the optimal punishment policy for antitrust is one that internalizes the consumer harm (Becker 1968, 199).

While it is true that the two policies suggested by enforcement theory, harm internalization and complete deterrence, can be satisfied in the antitrust setting by a penalty that internalizes consumer harm, the different policy goals of the internalization and deterrence approaches should be kept in view. The reason is that there may be instances in which the internalization approach is administratively infeasible. For example, the internalization approach requires the punishment authority to produce a precise estimate of the consumer wealth transfer and the forgone consumer surplus. The data necessary to generate such an estimate may be unavailable. In such a case, where the risk of error is substantial, it is important to identify the precise policy basis for punishment.

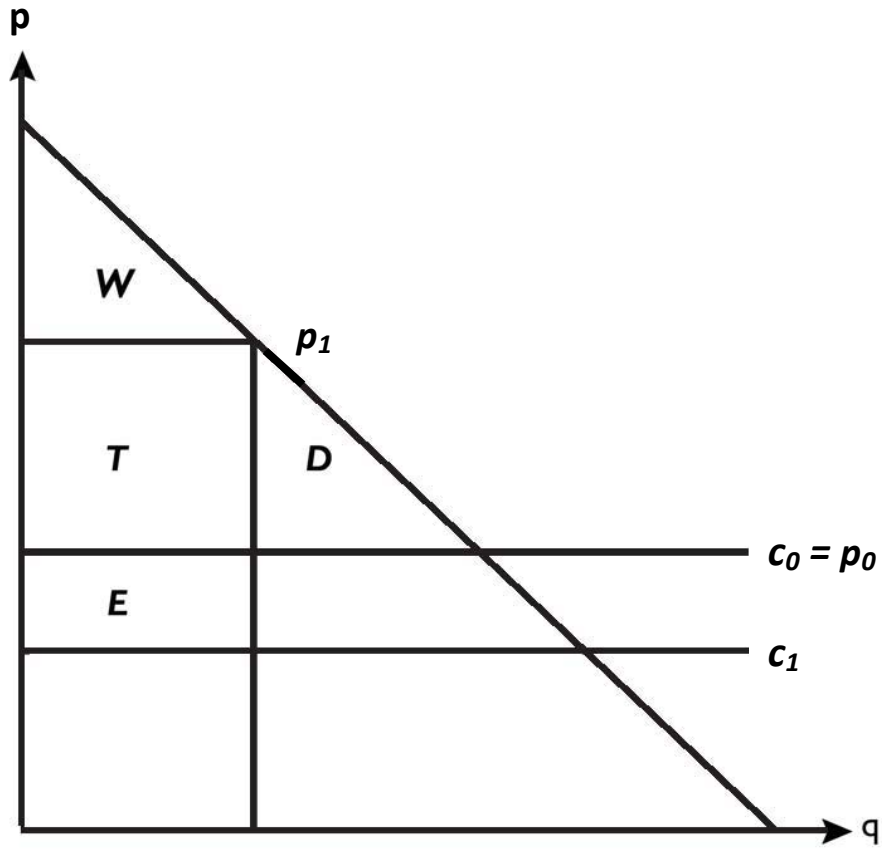


Figure 1: Monopolization with Cost Reduction

Actual Punishment Policies

The actual punishment policies of the U.S. and EU systems do not closely follow the prescriptions of optimal punishment theory. However, their key elements are distinctive and can be associated with the goals of harm internalization and complete deterrence.

Consider U.S. enforcement policy. The Sherman Act sets out a fixed maximum penalty of \$100 million (Federal Trade Commission n.d., 1). In addition, U.S. law permits courts to deviate from the fixed maximum penalty in the statute by imposing a penalty equal to twice the loss imposed by the violator on consumers (18 U.S.C. §3571; Hylton 2003, 49). In addition, private lawsuits enable plaintiffs to sue for treble damages (see, e.g., Hylton 2003, 48-49). Private lawsuits outnumber government lawsuits by a 10-1 ratio (Salop and White 1986, 1003).

An optimal consumer harm-based penalty would divide the consumer harm, which is the sum of the wealth transfer and the forgone consumer surplus, by the probability that the monopolizing firm will be punished. Thus, going back to Figure 1, the optimal penalty is equal to $T+D$, divided by the probability of punishment. The reciprocal of the probability of punishment is therefore the “optimal multiplier” that should be applied to the consumer harm penalty.

American law, in contrast, imposes the transfer, T , as a penalty on the monopolizing firm, and employs either a multiplier of two under the fines enforcement law, or a multiplier of three for private lawsuits. These multipliers may or may not be optimal, depending on the relationship between the probability of punishment and the statutory multipliers of two and three. For example, if the probability of punishment – say because detection is difficult – is 1/10, then the multipliers on fines and damages would be too low to efficiently internalize the consumer harm.

Although the statutory multipliers may not be optimal, the American approach is broadly consistent with the harm internalization approach to punishment. The penalty for an antitrust violation varies directly with the magnitude of the consumer harm. Thus, the American antitrust punishment system is one in which violators pay a penalty that is proportional to consumer harm, where the proportionality factor is greater than one.

Now consider EU antitrust enforcement policy. The EC Treaty provides that the penalty for an infringement will be based on the total sales of the violator, with a maximum penalty equal to ten percent of the total revenue of the violator (Kaczorowska 2008, 873). Article 83(2) of the EC Treaty instructs that penalties should “ensure compliance with the prohibitions laid down in Article 81(1) and Article 82” (European Community Treaty 2002, art. 83). The relevant treaty provisions have been interpreted by enforcement officials and commentators to support the deterrence rather than the internalization objective (*Showa Denko v. Commission*, para. 58, cited in Wils 2007, 205 n.57; *Archer Daniels Midland v. Commission*, para. 49).⁶

⁶ EU competition policy’s emphasis on deterrence was also apparent when the EU Commission imposed double the basic fine against Microsoft in the EU-Microsoft cases (see Economides and Lianos 2010, 372).

The lesson suggested is that the EU penalties are designed to deter prohibited conduct completely by eliminating the prospect of earning profits through conduct that violates the antitrust laws. The EU penalties are *not* designed to vary directly with the amount of consumer harm; they are structured to vary directly with the amount of profit that a firm gains from conduct deemed to violate EU competition law.

Thus, the penalty provisions under U.S. and under EU antitrust law reflect the major economic theories of punishment, complete deterrence and internalization. The EU has embraced complete deterrence as the objective of enforcement. The U.S. has adopted the harm internalization approach.

One might be inclined to conclude that the EU has the relatively inefficient enforcement system. Penalties, such as those under the EU system, that run proportional to revenues punish efficient as well as inefficient monopolizing conduct with equal severity. The U.S. system enables firms that intend to engage in efficient monopolizing acts to go forward and reap the rewards, as long as those rewards are sufficiently greater than the harm to consumers.

On closer inspection, the comparison, on efficiency grounds, of enforcement provisions in the U.S. and EU requires consideration of more minute features. First, consider the distinction between *cartelization* (anticompetitive agreements among firms, such as price-fixing) and *monopolization* (anticompetitive single-firm conduct).

Linking monetary fines to revenues, as the EU system does, may be efficient overall when applied to cartelization. If the cartels do not have an efficiency basis, as the enforcement structures in the U.S. and in the EU assume, then the complete deterrence objective is optimal. It happens that a policy of imposing penalties that are a multiple of consumer harm will achieve the complete deterrence objective just as effectively as a policy that aims to eliminate gains. But the policy of complete deterrence, rather than harm internalization, remains the correct policy on social welfare grounds.

If a cartel does have an efficiency basis, then the EU system would impose inefficiently large penalties – assessing a penalty based on the sum of the wealth transfer and the efficiency gain ($T+E$) instead of limiting the penalty to the wealth transfer (T). However, both punishment systems are based on the assumption that the vast majority of cartelization cases are inefficient wealth transfers. If this assumption is correct, then the EU system's average degree of inefficiency in cartel punishment cases may be less than that of the U.S. The reason is that the EU would impose the correct level of the fine in the vast majority of cases, and an inefficiently large fine in a minority of cases. Under the same assumptions, the U.S. fine, limited to the transfer, might fall short of providing optimal deterrence because it fails to fully internalize consumer harm.

To clarify this argument, consider the following hypothetical. Suppose a firm that is (correctly) found guilty of participating in an inefficient price-fixing conspiracy has a total annual revenue of \$20 billion. Suppose the firm's gross gain from the conspiracy

(*T*) is \$150 million, and the forgone consumer surplus (*D*) is \$75 million. The penalty under U.S. law could be as high as \$300 million – since the rules permit courts to deviate from the \$100 million Sherman Act limit up to twice the gross gain from the conspiracy. The penalty under EU law could be as high as \$2 billion (10 percent of revenue). If the likelihood of being punished for the conspiracy is 1/10, the amount necessary to internalize consumer harm is \$2.25 billion, and the amount necessary to eliminate the prospect of gain is \$1.5 billion. The Sherman Act penalty of \$300 million would be too low, from either the internalization or the complete deterrence perspective. The EU rules, however, could result in an optimal penalty for deterrence purposes. If the EU penalty were set at a level between \$1.5 and \$2 billion, it would eliminate the gain prospectively, which is sufficient to meet the optimal punishment goal in this scenario. If the EU penalty were set at its maximum of \$2 billion, it would come close to internalizing the consumer harm (the wealth transfer and the foregone consumer surplus).

Moreover, the U.S. enforcement system imposes imprisonment as a punishment on relevant officials in price-fixing cases, while the EU system limits punishment to the imposition of monetary fines (Connor 2001, 89). The imprisonment of firm officials may offset the tendency toward underdeterrence suggested in the numerical example just offered, but it depends on many factors that are shrouded in uncertainty. Imprisonment concentrates the risk of punishment on the minority of actors who are responsible for the price-fixing agreement. If those actors are not aware of the risk of imprisonment, they will not be deterred. If they are aware of the risk, they are likely to be deterred, but even this conclusion is uncertain because it depends on the actors' risk preferences and psychological attachments. For the relevant actors, the expected cost of imprisonment, given the low probability, may appear to be small in comparison to the rewards.

In addition, imprisonment generates excessive litigation, as firms and targeted officials spend huge sums to avoid the punishment. Some of the executives imprisoned have long productive records as employees in their industries; they are not common criminals. Society forfeits the value of their services by locking them up.

These points of comparison suggest that the broad-brush, gain-based penalties under the EU system may be superior on social welfare grounds to the penalty system enacted under the US antitrust laws for cartelization cases. At the least, it is unclear a priori whether the U.S. or the EU has the socially preferable system for punishing cartel activity.

With respect to monopolization, a different assessment seems appropriate. In the monopolization context, the EU fine system appears to be inferior on welfare grounds to the U.S. punishment system. The EU system aims to strip the gains from monopolizing conduct, which deters both efficient as well as inefficient conduct. The U.S. punishment system, in contrast, discriminates between efficient and inefficient monopolizing conduct. The discrimination process is not perfectly optimal, but it is probably superior on social welfare grounds to the EU punishment system.

To clarify this argument, return to Figure 1. Under the U.S. system, the monopolizing firm would be required to pay a penalty that is likely to be a multiple of the consumer harm – a multiple of two under public enforcement, and three under private enforcement. If the efficiency gain from its conduct is sufficiently large, the U.S. punishment system will not deter a firm from engaging in efficient monopolizing conduct.

For example, suppose, in an particular instance of monopolization, the wealth transfer is \$150 million, the forgone consumer surplus is \$75 million, and the efficiency gain is \$200 million. Assume also that the likelihood of being punished is fifty percent – which reflects the greater likelihood of detection and enforcement in monopolization cases. Thus, the firm's gain from monopolization, which is equal to the sum of the wealth transfer and the efficiency gain, is \$350 million. Moreover, since the efficiency gain exceeds the forgone consumer surplus, this is a case of efficient monopolization. The penalty imposed under the U.S. system would be either \$300 million (twice the transfer) under public enforcement or \$450 million (three times the transfer) under private enforcement. In either case (public or private enforcement), the monopolizing firm would not be deterred under the U.S. punishment system. The reason is that the expected penalty, whether under public or under private enforcement, would be less than the gain from monopolization: under public enforcement, the expected penalty would be \$150 million, which is less than the \$350 million gain from monopolization; and under private enforcement the expected penalty would be \$225 million, which is also less than the \$350 million gain from monopolization. The monopolizing firm would not be deterred by the threat of penalization under the U.S. system, and this is the efficient result.

Under the EU system, the monopolizing firm would be required to pay a penalty that is likely to be a multiple of the sum of the transfer and the efficiency gain ($T+E$). Thus, in a case of efficient monopolizing conduct, the firm definitely would lose rather than gain after taking the penalty into account. For example, suppose a firm with annual revenue of \$20 billion engages in a monopolizing act in some part of its business. The transfer from consumers is \$150 million, the forgone consumer surplus is \$75 million, and the efficiency gain is \$200 million. The firm's total gain from monopolization is therefore \$350 million. As in the previous example, this is a case of efficient monopolization. The EU could impose a fine on the firm as high as \$2 billion.⁷ If it chooses a fine greater than \$700 million, though still well below the penalty ceiling, it would completely deter the monopolizing act, an inefficient outcome.

The general picture that emerges from this comparison is that the U.S. antitrust law enforcement system is compatible with the efficiency goal while EU law is not. EU law has followed Bentham by setting fines sufficiently large to wipe out the gains from conduct deemed unlawful. U.S. law has followed Becker by keeping damages closely tied to the harms suffered by consumers.

⁷ I have assumed that the firm is large (revenue \$20 billion). Obviously, if the firm's revenue is not much more than the amount it receives from the monopolizing activity, the EU fine may be far less than the amount required to deter.

The inefficiency of the EU enforcement system is not limited to the EU. China's competition law enforcement system is modeled on the EU's provisions (Wei 2011, 812-815), as are the enforcement rules of several other competition enforcement authorities, including Pakistan and Singapore (Wilson 2011, 111; Ong 2007, 109-110). The prevalence of the EU enforcement model indicates a strong preference for enforcement provisions that threaten fines tied to gain, as a form of trade tariff, rather than fines tied to consumer harm.

Substantive Standards: Predation

The second important area in which to examine the differences between the major competition regimes is substantive law. There are many parts of substantive law to examine. At the most general level, however, the antitrust laws fall into one of two categories: prohibitions on cartelization, or prohibitions on monopolization. Since the substantive policies with respect to cartelization are virtually the same in all competition regimes, I will focus on monopolization law; specifically, predatory pricing.

A predatory pricing claim is an assertion by one firm, the predation target or victim, that it has been injured by the low prices of another, the incumbent dominant firm. The victim typically argues that the dominant firm cut its price during a predatory campaign, in order to force the victim to sustain losses that would compel it to leave the market. After the victim leaves the market, the dominant firm, if all goes according to the theory, raises its price to the monopoly level. During the period in which the dominant firm prices at the monopoly level, it recoups the losses that it suffered during the predatory pricing campaign.

Predatory pricing claims in the U.S. fall under Section 2 of the Sherman Act. The law under Section 2 puts high hurdles in the way of predation plaintiffs. In order to avoid a summary judgment in a predation lawsuit, the plaintiff must present evidence that the defendant set its price below some reasonable proxy for marginal cost, and that the market structure is such that it would permit the defendant to recoup its losses from the predation campaign, after the victim has been forced out of the market (*Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 222-224). Both requirements are difficult to meet.

The EU law on predatory pricing imposes a lighter burden on the plaintiff. Under EU law, unlawful predation is established if the evidence shows that the defendant sets its price below average variable cost (*see, e.g., AKZO Chemie BV v. Commission*, para. 71). If the defendant set its price below average cost but above average variable cost, then predation can be established if the evidence suggests that it was accompanied by an intention to exclude the plaintiff (*AKZO Chemie BV v. Commission*, para. 72). The evidence required to prove predatory intent includes objective factors, such as the duration of the predatory period and the number of units sold at the allegedly predatory price. The evidentiary requirements suggest that, in practice, a significant burden falls on the defendant to disprove predatory intent when price is below average cost and above average variable cost.

The difference between the U.S. and EU standards on price predation reduces to this: the U.S. uses a marginal cost test and the EU uses an average cost test. Figure 2 illustrates the fundamental differences between the U.S. and EU with respect to predation. Price cuts below the marginal cost curve (MC) are predatory in the U.S., provided market structure evidence shows the plausibility of recoupment (*Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 210). In the EU, price cuts below the average cost curve (AC) are predatory. Since marginal cost is nearly impossible to measure precisely, the U.S. law encourages courts to examine reasonable proxies to marginal cost (*Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 223). However, the goal is to use a measure that approximates marginal cost (*United States v. AMR Corp.*, 1115-1116).

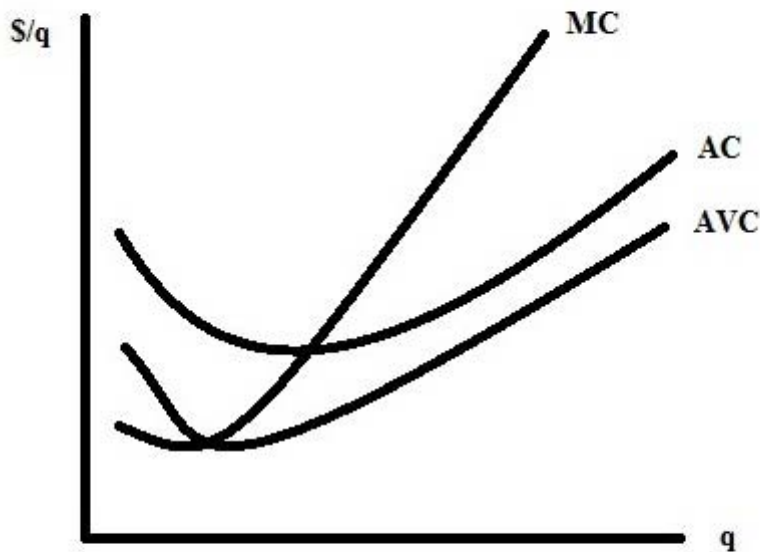


Figure 2: Marginal Cost, Average Cost, and Average Variable Cost

The U.S. marginal cost test, as Areeda and Turner (1975, 701-702) argued, is the efficient standard. When price is above marginal cost, a cut in price moving it in the direction of marginal cost, along with an associated increase in consumption, enhances social welfare. Conversely, when price is below marginal cost, a cut in price moving it away from marginal cost reduces social welfare. The reason is that price, under ideal conditions, reflects the marginal benefit to society from producing an extra unit of a good. Marginal cost, under ideal conditions, reflects the resource cost to society of supplying an additional unit of a good to the market. As long as price exceeds marginal costs,

society's welfare can be enhanced by expanding consumption. Hence, a marginal cost test for predation is consistent with a policy of enhancing society's welfare.

The average cost test of the EU disregards the efficiency principle and creates a price umbrella based on the dominant firm's average total cost. As long as a rival firm can match the average total cost of the dominant firm, it is shielded from additional price pressure under the EU law. In addition, given the uncertainties in measuring cost, and the amount and duration of losses a predatory target firm must experience before it is financially compelled to leave the market, the EU's average-cost standard effectively shields relatively inefficient firms from vigorous price competition.

The precise function or objective of the EU predation standard has never been set out clearly. One possible justification is that an average cost pricing standard enhances the set of options to consumers, by preventing efficient price predation. If this is indeed the purpose of the standard, it is unlikely that it enhances consumer welfare. It preserves relatively inefficient rivals and forces consumers to pay higher prices. The consumers themselves probably would have chosen to pay lower prices for fewer retail options, as they often do when price-cutting firms displace higher-priced rivals.

Another possible justification for the EU average-cost standard is that it preserves employment, by reducing the frequency with which price competition leads to the exit of firms that are the victims of predatory pricing campaigns. Less efficient firms are more likely to survive under the EU standard. Perhaps in a state with a generous welfare system, the policy of preserving less efficient firms is less expensive for taxpayers than a policy that allows them to be driven out of business by efficient price predation. In other words, the average-cost standard may be, in essence, a public welfare policy. The efficiency of such a policy cannot be determined without taking into account the relative inefficiencies of the administrative state.

Procedure

The third important difference between U.S and EU antitrust law is procedure. I refer to procedure in the broadest sense; from the processes by which the legal standards evolve to the methods used to determine the validity of evidence.

Development of Law

The U.S. is unique among competition law regimes in that its law is developed through the common law process. The Sherman Act says relatively little (Sherman Act 2004, §§ 1 & 2). It can be accurately summarized by saying that it prohibits price-fixing and monopolization. The detailed rules that have developed in American antitrust law have almost all come out of the courts.

The EU law has been set out in a relatively sparse treaty. The European Community Treaty ("EC Treaty"), however, is more detailed in its statement of prohibitions than is the Sherman Act (European Community Treaty 2002, art. 81). Moreover, the precise

meanings of the key competition provisions of the EC Treaty, Article 81 (now Article 101 of the Treaty on the Functioning of the European Union (“TFEU”)) and Article 82 (now Article 102 of the TFEU), have been developed for the most part by the European Commission. For example, the EU Commission has been instrumental in clarifying “Market Definition” under EU Competition Law, which has ramifications for both Article 81 and 82 enforcement (*see* Report Prepared for the Competition Directorate-General of the European Commission 2005, 5). The EU courts defer to the European Commission on issues concerning the interpretation of the competition rules (Marsden 2009, 27).⁸ As a result, the system of EU courts is not the primary body that interprets the meaning of the competition provisions of the EC Treaty.

These differences in the processes under which competition law develops have important implications. The American process essentially grafts onto the common law an additional branch called antitrust law without changing the process by which cases are litigated or decided in any substantial manner. Under the common law process, courts independently develop a framework for applying legal rules and modifying them in light of facts or policy arguments.

The common law process permits both sides in litigation, plaintiff and defendant, to present their positions on the meaning of the law and the state of the evidence to an impartial observer, the court. The court inevitably has some degree of discretion in both matters. Cases that are easily decided on the basis of the statutory text, or on the basis of earlier decisions, do not continue for a long time in court. Judges dismiss them, or decide them quickly, or the parties settle. The vast majority of legal disputes that spend enough time in court to come before judges have sufficient uncertainty surrounding them that the judge inevitably has discretion to decide what the law requires as between the litigating parties. The discretion that judges have had under the U.S. antitrust laws is equivalent to the discretion they have had under the common law for centuries.

The discretion given to judges under the American process has permitted courts to consider the social consequences of their decisions, and to issue judgments that effectively reduce the social costs of the rules they administer. Common law judges, in the course of examining the consequences and implications of their decisions, trade off the social costs of false convictions and false acquittals. Judges do not have to discover the relevant social costs on their own; the litigating parties have strong incentives to bring this information directly to the judges’ attention. Most likely because of this constant process of weighing cost tradeoffs, American antitrust law has tended toward adopting efficiency-based legal standards, such as the marginal cost based test in predatory pricing law.

⁸ The European Court of First Instance reviews Commission decisions by a “manifest error of assessment” standard which considers “whether the facts on which the Commission's assessment was based were correct, whether the conclusions drawn from those facts were not clearly mistaken or inconsistent and whether all the relevant factors had been taken into account.” This limited standard of review is deferential to the Commission.

The dominant role of the enforcement agent imparts a different tendency to the law's evolution in EU. The enforcement agent will tend to interpret the law not in a manner that impartially weighs or trades off social costs from false convictions and false acquittals, but in a manner that minimizes its own enforcement costs. The dominance of per se standards based on relatively simple and abstract rules in the EU can be explained by their utility to the enforcement agent (Evans and Ahlborn 2008, 29).

The importance of administrative facility and the relative detachment of courts from the law-generation process put the EU system closer to a civil law model rather than the common law model of the U.S. Given that EU courts are staffed largely with judges drawn from civil law countries the tendency for a civil law system to develop is natural (Eurofound 2011; Apple and Deyling 1995, 1).

The EU rule on predatory pricing, for example, is an administratively simple rule. It does not require the complainant to generate a reasonable proxy of the defendant's marginal cost, which is a difficult undertaking, both for the enforcement agent and for the court. It is not efficient as a rule governing competition. However, it is efficient on administrative grounds in comparison to the American rule.

Although I have referred to American and EU law, the EU pattern has been replicated in China and other countries. Thus, one could say that competition law outside of the U.S. is largely shaped by demands of the enforcement agent. Competition law in the U.S. is shaped by the traditions of common law courts.

Evidence and Procedure

The deference policy that EU courts have adopted with respect to the EC's competition enforcement decisions implies important differences in the assessment of evidence and findings of fact. In the U.S., antitrust enforcement agencies and private plaintiffs have to present evidence to a court and attempt to persuade the court that a conspiracy has occurred, or that a defendant should be deemed a monopolist. In the EU, the complainants face the same requirements but in the presence of the enforcement agent, rather than a court. If the enforcement agency has made a decision or is inclined to pursue a case, all evidence and policy arguments will be examined under the influence of that decision.

The distinction between the U.S. and EU systems is one between a court-centered process and an agency-centered process. In a court-centered process, as in the U.S., the plaintiff, whether a private plaintiff or an enforcement agency, knows that it will have to persuade a skeptical court of the validity of its arguments, and must prepare its case with this in mind. Under an agency-centered process, the agency has a relatively small likelihood of ending up in a court in a particular case. A complainant approaching the enforcement agency will have to persuade the agency that it has a colorable claim, which is less than the burden, to prove that a violation of the law has occurred, borne by a private complainant in a court.

Moreover, there is an important difference between the agency enforcement processes in the U.S. and in the EU with respect to the degree of separation between prosecutorial and adjudicative functions. The agency enforcement process in the U.S. is observed in practice when the FTC brings an enforcement action against an entity. Firms often approach the FTC with antitrust complaints against market-dominating competitors. If the FTC chooses to proceed with a complaint, it will either go to a federal court or to an administrative law judge, depending on the statute it seeks to enforce. While the FTC must bring enforcement actions for Clayton Act violations in federal court, the FTC may enforce Section 5 of the FTC Act through internal administrative litigation before an administrative law judge, a process known as Part III proceedings (Antitrust Modernization Commission 2007, 129). In either case, the FTC must prepare its arguments and evidence to withstand questioning by an independent official. Moreover, the FTC General Counsel's office is independent of the FTC Commissioners, the final decision-making body within the agency process (Coate and Kleit 1995, 1-2). There are substantial walls of separation between the prosecutorial and adjudicative arms of the FTC's enforcement process.

The agency process in the EU is distinguishable in the sense that the European Commission considers complaints and conducts investigations, but there is no separation between the prosecutorial arm and the adjudicative arm within the EC agency process. Evidence and arguments are not subjected to an independent assessment until they are appealed to the EU courts, which have adopted a deference policy with respect to such matters. And since the EU courts have adopted a deference policy, there really is no point at which the EC's evidence and arguments are subjected to a rigorous and independent evaluation of merit.

The enforcement system in China is based on the EU model. Moreover, the absence of democracy and of basic "rule of law" norms prevent the court system in China from becoming reliably independent of the interests of the government.

The upshot is that outside of the U.S., competition law procedure effectively combines prosecutorial and adjudicative functions. This is a very substantial chasm between the enforcement regimes. The procedures adopted under the EU model are inconsistent with fundamental requirements of due process in American law.

The differences in substantive law probably pale in importance when compared to the differences in procedure. If the EU adopted efficiency-based legal standards, or an efficiency-based approach to punishment, the potential improvements in welfare could easily be vacated through the absence of reasonable due process safeguards in the enforcement process.

Conclusion

With more than 100 competition law regimes, there are countless ways in which antitrust law regimes can vary around the world. However, two models are dominant in terms of their effects on global commerce: the U.S. and the EU. This chapter has compared those

models in terms of enforcement, substantive law, and procedure. With respect to enforcement and substantive law, the U.S. has evolved toward an efficiency-based system while the EU has not. The procedural differences are perhaps more important than the differences in substantive law. The EU process of law development is closer to the civil law model while the American process is safely within the common law tradition. Retail-level procedural issues, such as the treatment of evidence, reveal stark differences, the most significant of which being the relatively weak separation of prosecutorial and judicial functions within the EU enforcement process.

References

- Antitrust Modernization Commission (2007), *Report and Recommendations*, <http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf>.
- Apple, James G. and Robert P. Deyling (1995), *A Primer on the Civil-Law System*, Federal Judicial Center, <[http://www.fjc.gov/public/pdf.nsf/lookup/civillaw.pdf/\\$file/civillaw.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/civillaw.pdf/$file/civillaw.pdf)>.
- Areeda, Phillip and Donald F. Turner (1975), Predatory Pricing and Related Acts Under Section 2 of the Sherman Act, *Harvard Law Review* 88: 697-733.
- Bartz, Diane and Foo Yun Chee (2012), Google gets U.S., EU nod to buy Motorola Mobility. *Reuters*, Feb. 14. <<http://www.reuters.com/article/2012/02/14/us-google-motorola-eu-idUSTRE81C1HE20120214>>.
- Becker, Gary S. (1968), Crime and Punishment: An Economic Approach, *Journal of Political Economy* 76: 169-217.
- Coate, Malcolm B. and Andrew N. Kleit (1995), The Political Economy of Federal Trade Commission Administrative Decision Making in Merger Enforcement, Federal Trade Commission Working Paper 210, <<http://www.ftc.gov/be/workpapers/wp210.pdf>>.
- Connor, John (2001), *Global Price Fixing: Our Customers Are the Enemy*, Boston, MA: Kluwer Academic Publishers.
- Economides, Nicholas and Ioannis Lianos (2010), A Critical Appraisal of Remedies in the E.U. Microsoft Cases, *Columbia Business Law Review* 2010(2): 346-420.
- Eurofound (2011), European Court of Justice, <http://www.eurofound.europa.eu/areas/industrialrelations/dictionary/definitions/EUROPEAN_COURT_OF_JUSTICE.htm>.
- European Community Treaty (2002), Official Journal of the European Communities C 325/39, <http://eur-lex.europa.eu/en/treaties/dat/12002E/pdf/12002E_EN.pdf>.
- Evans, David and Christian Ahlborn (2009), The Microsoft Judgment and its Implications for Competition Policy Towards Dominant Firms in Europe, *Antitrust Law Journal* 75: 887-932.
- Farmer, Susan B. (2010), The Impact of China's Antitrust Law and Other Competition Policies on U.S. Companies, *Loyola Consumer Law Review* 23: 34-53.
- Federal Sentencing Guidelines, U.S. Code. Title 18, 1984.

Federal Trade Commission (FTC) (n.d.), *An FTC Guide to the Antitrust Laws*, <<http://ftc.gov/bc/antitrust/factsheets/antitrustlawsguide.pdf>>.

Hylton, Keith N. (n.d.), *Antitrust World Reports*, <http://antitrustworldwiki.com>.

Hylton, Keith N. (1998), Punitive Damages and the Economic Theory of Penalties, *Georgetown Law Journal* 87: 421-471.

Hylton, Keith N. (2003), *Antitrust Law: Economic Theory and Common Law Evolution*, New York, NY: Cambridge University Press.

Hylton, Keith N. and Fei Deng (2007), Antitrust Around the World: An Empirical Analysis of the Scope of Competition Laws and Their Effects, *Antitrust Law Journal* 74: 271-341.

Hylton, Keith N. and Haizhen Lin (2010), Optimal Antitrust Enforcement, Dynamic Competition, and Changing Economic Conditions, *Antitrust Law Journal* 77: 247- 276.

Kaczorowska, Alina (2008), *European Union Law*, New York, NY: Routledge-Cavendish.

Landes, William M. (1983), Optimal Sanctions for Antitrust Violations, *University of Chicago Law Review* 50: 652-678.

Leslie, Christopher R. (1993), Achieving Efficiency Through Collusion: A Market Failure Defense to Horizontal Price-Fixing, *California Law Review* 81: 243-292.

Marsden, Phillip (2009), Checks and Balances: EU Competition Law and the Rule of Law, *Competition Law International* 5(1): 24-29.

Ong, Burton (2007), Competition Law Takes Off in Singapore: An Analysis of Two Recent Decisions, *Competition Policy International* 3(2): 101-131.

Posner, Richard A. (2001), *Antitrust Law*, Chicago, IL: University of Chicago Press.

Report Prepared for the Competition Directorate-General of the European Commission (2005), *Market Definitions in the Media Sector: Comparative Legal Analysis*, July. <http://ec.europa.eu/competition/sectors/media/documents/chapter_1_ec.pdf>.

Salop, Steven C. and Lawrence J. White (1986), Economic Analysis of Private Antitrust Litigation, *Georgetown Law Journal* 74: 1001-1064.

The Sherman Act, 15 U.S.C. § 1 *et seq.* (2004).

Wei, Dan (2011), China's Anti-Monopoly Law And Its Merger Enforcement: Convergence and Flexibility, *Journal of International Economic Law* 14: 807-844.

Whitney, Lance (2012), Chinese Regulators drag heels on Google-Motorola Deal, CNET, Mar. 20. <http://news.cnet.com/8301-13578_3-57400661-38/chinese-regulators-drag-heels-on-google-motorola-deal/>.

Wils, Wouter P.J. (2007), The European Commission's 2006 Guidelines on Antitrust Fines: A Legal and Economic Analysis, *World Competition* 30: 197-231.

Wilson, Joseph (2011), Crossing the Crossroads: Making Competition Law Effective in Pakistan, *Loyola University Chicago International Law Review* 8: 105-125.

Cases Cited

Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993).

Case 62/86, *AKZO Chemie BV v. Commission* [1991] ECR 3359.

Case 289/04, *Showa Denko v. Commission* [2006], Opinion of Advocate General Geelhoed, ECR 05859.

Judgment of the Court of First Instance, Case 329/01, *Archer Daniels Midland v. Commission* [2006] ECR 03255).

United States v. AMR Corp., 335 F.3d 1109 (10th Cir. 2003).