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Economic Principles of Predatory (Exclusionary) Pricing in the US and in the EU Their (mis)Application in Some Recent Competition Law Cases of the European Community Commission and the Court of First Instance

Predatory pricing is one of the most debated issue among the many possibly abusive behaviors of a dominant firm. The general prohibition of the abuse of a dominant power in the competition law is meant to render more difficult to use that power but not to disable them to compete. The borderline between a rough but lawful competitive behavior of a dominant firm and the illegal abuse of the market power could sometimes be very narrow. One of that narrow line is associated with the so called predatory pricing or exclusionary pricing. One of the necessary preconditions for predatory pricing is that the firm is required to set the price below costs. But could it be a sufficient condition as well? Before the AKZO-case lawyers and economists seemed to agree that predatory pricing requires a second phase, after the dominant firm successfully got its prey in the first phase, the recoupment phase during which the dominant firm is able the regain all of his former losses occurred in the first phase. Since the AKZO-case, the Commission succeeded to convince Courts of the EU that it would be enough to make probable but not certain that there had to be a recoupment phase but we don't have to wait until it really happens. Most of the economists still think that predatory pricing is meaningless without recoupment, and what is more important, it would be beneficial to the consumers during the first phase unless there is no certainty of a second phase.¹

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Although the concept of a *dominant firm* is not subject of this article, we cannot afford not to inform our reader the most important aspects of this concept. Dominance is essentially a legal rather than an economic concept. Economists focus on the issue of market power

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rather than dominance. While there are obvious links between the two concepts they are somewhat different. In economic terms market power is defined as power over price. In a not perfectly competition markets the firm's demand curve is always downward sloping. This means that, if the firm unilaterally increases its prices, it will lose some but, crucially, not all of its sales. This gives it some power over price. Many real world firms therefore have some market power and at the same time face competition from rivals. To be regarded as dominant, a firm, or group of firms, besides having sufficient market power, it must be able to raise price or *act in some other way independently of its rivals*.²

A dominant firm, however, may face competition from other firms. A dominant firm is typically much larger than its rivals. These smaller firms could achieve large increases in profitability by competing aggressively with the dominant firm.³ It follows, that a dominant firm may have to face tough competition which may require tough responses from the dominant firm. The relevant question in this respect is that *where is the borderline between harsh but genuine legal competitive measures and the abuse of that dominant position*. In this paper we ask this question *concerning only the allegedly predatory pricing behaviors of a dominant firm*.

Predatory pricing generally involves three equally important parts:

- The company applying that policy has to be in a dominant position.
- The strategy must involve pricing, usually charging below cost prices, which usually leads to a significant loss.
- A special market environment into which competitors may find difficult to enter or reenter after the dominant firm will successfully eliminated its existing competitors which enables it not only to regain (recoup) its former losses but to make extra profits in the future.

The Basic Economics of Predatory Pricing

The *traditional theory of predatory pricing* envisions two stages in carrying out the predation strategy – the predation stage and the post-predation stage. In the predation stage, the predator prices its product below some measure of economic cost – typically incremental cost – with the intent of driving its prey from the market. In the post-predation stage, the prey leverages the absence of meaningful competition to price its product at *supra-competitive* levels, thereby recovering the losses incurred during the predation stage and earning monopoly profits thereafter (McGee 1980).

The consensus view in the literature, and this is a view that has prevailed for several decades now, is that traditional predation is difficult and hence frequently irrational. Because firms will re-enter the market when the predator commences pricing at *supra-competitive* levels, recoupment of the losses incurred in the predation stage is virtually impossible. Hence, in order for the predation strategy to be successful, there must be some

² One of the earliest formulation of that concept by the European Court: *‘the fact that an undertaking is compelled by the pressure of its competitors’ price reductions to lower its own prices is in general incompatible with that independent conduct which is the hallmark of a dominant position’* (Hoffman LaRoche v. Commission 1979, ECR 461 at para 71).

³ In the literature smaller firms in such circumstances are referred to as a ‘competitive fringe’.

type of barrier to entry that precludes entry from occurring when the predator prices at *supra-competitive* levels (Joskow and Klerovick 1979).

Traditional predation is likely to be particularly difficult in regulated network industries due to the high-proportion of sunk costs and the fact that productive capacity typically does not leave the industry even if particular competitors should exit the market. In other words, productive capacity in the industry serves as a check on *supra-competitive* pricing. Consequently, even if predation should succeed in driving a particular competitor from the market, the (independent) productive capacity that the competitor leaves behind continues to discipline pricing (Weisman 2002).

Starting as early as 1980's, in concert with important developments in game theory, a number of *modern, strategic theories of predation* have emerged. These models, which include financial market predation, reputation models and cost signaling models,⁴ generally require conditions of asymmetric information. In other words, the predator has information that its prey does not, and it leverages this informational asymmetry to drive the prey from the market or to deter its expansion into new markets. In other words, the predator has information that its prey does not, and it leverages this informational asymmetry to drive the prey from the market or to deter its expansion into new markets.

In the case of *financial market predation*, the prey is dependent upon some source of external financing. The focus is on the relationship between the prey and its investors. The predator tries to manipulate that relationship. For example, the predator may reduce prices in order to reduce the profitability of its rivals. The rival's investors view this decrease in profitability as a signal that prospects in this market are limited and decide to decrease financial support accordingly. In this model, investors are unable to differentiate between the predation campaign and managerial incompetence (Bolton, Brodley and Riordan 2000:54).

Telser (1966) set out a model of the "*long purse*" in which predation occurs because the predator, with superior resources, can outlast the prey. In Telser's model the interest rate at which a firm can borrow increases as the firm's reserves decrease, which in turn constrains the amount a firm can borrow. In order to remain viable, firms must incur per period fixed costs even if they do not produce any output. Because this is common knowledge, the predatory firm can calculate the number of periods its prey could last given predatory prices. Under these conditions, a firm with greater resources can successfully deplete the reserves of the less capitalized victim, thus limiting the victim's ability to borrow and eventually driving him from the market. If the additional monopoly profits outweigh the predator's reduced profits that result from predatory pricing, predation is a rational strategy vis-à-vis a policy of entry accommodation. However, because all information is common knowledge, predation would not be observed in equilibrium. Because predation is costly to both firms, Telser suggests that the threat of predation should either deter entry in the first place or result in the parties agreeing to merge, with the terms determined by the relative costs of predation in the absence of an agreement. Moreover, if potential victims anticipate this, they can alter their capital structure to increase the cost of successful predation, and thus favorably alter the buyout price (Kobayashi 2000:16).

Beniot (1984) also modeled predation with a financially constrained entrant. Beniot first presents an infinitely repeated extensive form game where the entrant has resources

⁴ For a review of this literature, see Tirole (1988), and Bolton, Brodley and Riordan (2000).

to survive a finite number of price wars. Under complete and perfect information, Beniot derives a “reverse chain store paradox” result, where entry is deterred as long as the entrant’s ability to survive is finite. He then examines a game with incomplete information where the predator knows the maximum number of periods the entrant can stay in, but only knows with probability whether the entrant is committed to stay in the industry until bankrupt. Beniot derives a mixed strategy equilibrium where entry occurs, with entry being an increasing function of the entrant’s financial staying power.

Fudenberg and Tirole (1986) created a model where the entrant is uncertain about his per period fixed costs and uses current profits to decide whether to remain in the market. Given this, the incumbent has an incentive to use predation to reduce the entrant’s profits in order to cause the entrant to infer that he has high costs and should exit. Their “signal jamming” model can also be applied to lenders’ decisions to make or limit outside financing. *Bolton and Scharfstein* (1990) derive financial constraints based on firms’ attempts to control agency costs. In their model, lenders’ decisions regarding external financing are sensitive to a firm’s short term performance. This gives managers incentives and addresses manager shareholder agency costs. However, a predator knowing this relationship between a firm and its lender can take advantage of it by using price predation to lower current profits, which in turn reduces external financing and induces exit. If these contracts between firm and lender are observable, firms that are potential victims of predation will choose to make their contracts less sensitive to current performance, thus trading off higher agency costs for a lower threat of predation. The use of financial contracting by potential victims to reduce the threat of predation, and the effect of renegotiation on its effectiveness is further examined in *Snyder* (1996).

The reputation predation is based on a type of signaling that the predator seeks to gain a reputation for “toughness” and a strong willingness to defend its market at virtually any cost. The predator reduces prices in one market to induce the prey and other potential entrants to believe that the predator will cut price in other markets or in the predatory market at a later time. The predator seeks to establish a reputation as a price cutter, based on some perceived special advantage or characteristic. Thus, a predator trying to establish a reputation for financial predation cuts price when it has superior financial resources (and when the other conditions for financial predation are present) (*Bolton, Brodley and Riordan 2000:74*).

A set of studies examined reputation models where the assumption of perfect information was relaxed as a way to avoid the logic and result of the chain store paradox. *Milgrom and Roberts* (1982), *Kreps and Wilson* (1982) and *Kreps, Milgrom, Roberts and Wilson* (1982) developed models where some incumbents prefer to engage in predation rather than accommodating entry. Such preferences can result from the fact that predation is more profitable than accommodation in the single market setting, or alternatively from a narrowly irrational preference for predation when it is not. The entrant in these models does not know ex-ante what type of incumbent he is facing, strong (those with a preference for predation) or weak (those that would prefer to accommodate entry in a single market game) (*Kobayashi 2000:19*).

In this models, the predator reduces its prices in order to signal to its rivals that he is a tough competitor and that opportunities for positive returns will be strictly limited either in other markets or in the predatory market in the future (*Weisman 2002:5*) It is important to note, however, that this theory may not be completely robust. Although economic theory views reputation effect predation as a separate and distinct predatory strategy, a reputation

effect theory based on irrational toughness may be too easy to assert and too difficult to prove (*Bolton, Brodley and Riordan 2000*).

In the *cost signaling predation* the predator wishes to signal its rivals that it is a low-cost rather than a high-cost provider. Rivals will enter the market if they believe the dominant firm is a high-cost provider, but will not enter the market or will choose to exit the market if they believe the dominant firm is a low-cost provider. In cost signaling a predator drastically reduces prices to mislead the prey to believe that the predator has lower costs and to exit the market. More specifically, a predator trying to establish a reputation for low cost cuts price below the short run profit-maximizing level. Observing the predator's low price, the prey rationally believes that there is a least some probability that the predator has reduced costs. This lowers the prey's expected returns and causes the prey to exist (*Bolton, Brodley and Riordan 2000:100*).

A few other theories have also been published offering alternative explanations to predation with less significance. The theories of predation discussed above all rely on asymmetric information to generate rational equilibrium predation. However, asymmetric information is not a necessary condition to generate predation in equilibrium. *Cabral and Riordan (1997)* have a *learning curve model of equilibrium predation*, in which firms' current period production costs are a function of the cumulative production. In such a learning curve environment, Cabral and Riordan show that rational predation occurs in equilibrium, where the predator expands output and lowers price in order to further take advantage of the learning curve cost reductions and to induce its rival's exit. This predation can involve, but does not require, below-cost pricing. The welfare consequences of such learning curve predation are ambiguous. *Marx and Shaffer (1999)* have a complete information model of *predation in intermediate goods markets*. In their model, a manufacturer makes sequential purchases from two suppliers of differentiated inputs. They show that below-cost pricing of marginal units by the first supplier can facilitate rent extraction from the second, resulting in a higher joint surplus between the buyer and the first supplier. In their model, below-cost pricing does not result in exclusion, and welfare may increase or decrease (*Kobayashi 2000:17–18*).

Predatory Pricing in the US Legislation

Predatory pricing has a long history in competition law dating back to the US *Standard Oil* case in 1911, so the United States has a rich history of both statutory and case law that treats issues of price predation. The legal history of predatory pricing in the U.S. can be divided into three periods. During the first period following enactment of the Sherman Act, claims of predatory pricing were taken quite seriously (*Calvani 2000*). Indeed, the predatory tactics employed by John D. Rockefeller and the "Standard Oil Trust" are part of American folklore (*Tarbell 1904*). *The Standard Oil Case (1911)* became the paradigm. It was widely believed that Standard Oil were successfully able to drive competitors from the marketplace by temporarily selling below cost. Once achieved, these firms would raise prices above a competitive level and use those monopoly profits to finance predation elsewhere until they had taken over the entire marketplace.⁵

⁵ In as early as in the fifties some economists had started to question whether Rockefeller and his company ever actually engaged in predatory pricing, see for example *McKee (1958)*.

This view reached its zenith in the U.S. Supreme Court's decision in *Utah Pie Co. v. Continental Baking Co. Case. Utah Pie Co* (the plaintiff), a leading vendor of frozen pies brought suit against three national bakeries alleging that they had increased their market share by predatory pricing. Finding that the national bakeries sought to increase their market share above their combined 28 percent, the Court concluded that they charged less for their pies in the plaintiff's market than they did elsewhere. Indeed, during the forty-four month "price war", the plaintiff's market share decrease to 45%. The Supreme Court reinstated the jury verdict for the plaintiff notwithstanding evidence that the plaintiff's sales volume had increased during the relevant period and that it had continued to make a profit. While the U.S. Court did not address the specific definition of "below cost" sales, it maintained that average total cost was the appropriate standard. Suffice it to say that predatory pricing cases of that era were characterized by the relative large size of the alleged predator, geographic price discrimination, sales below average total costs, and predatory intent (*Brodley and Hay 1981*).

The second period began with the publication of a two Harvard Law School professors *Donald F. Turner and Philip Areeda* which radically changed the U.S. approach to the subject (*Areeda and Turner 1975*). Their important article offered a cost-based rule for determining whether or not a pricing strategy is predatory. *Under the Areeda-Turner test, prices can be found to be predatory only if they are below marginal cost or, if that cannot be determined, below average variable cost.*

*Areeda and Turner observed that predatory pricing is not common.*⁶ Nonetheless, they concluded that predatory pricing is still a subject for legitimate concern to antitrust policy makers as long as great care is taken not to deter vigorous competition. "That predatory pricing seems highly unlikely does not necessarily mean that there should be no antitrust rules against it. But it does suggest that extreme care be taken in formulating such rules, lest the threat of litigation...materially deter legitimate, competitive pricing."⁷

Areeda and Turner develop their rule from an analysis of the short-run, static model of the firm used in all introductory price theory textbooks. According to the textbook theorem, marginal cost pricing leads to a proper allocation of resources in the short run and claiming that the only explanation for below-marginal cost pricing is exclusionary intent, Areeda and Turner suggest that a price below "reasonably anticipated" short-run marginal cost is predatory unless at or above average total cost. Since data on marginal costs are difficult to obtain, average variable costs, which are much easier to ascertain, should be used by the courts as a proxy for marginal costs in the above formulation, unless average variable costs fall significantly below marginal cost in the relevant range of output (*Calvani and Siegfried 1988:279–82*).

Since then – for quite a long time – almost every Court of Appeals in the United States has accepted some form of the Areeda-Turner test (*Hurwitz and Kovacic 1982*). One of the problem with the Areeda-Turner cost-based test is that it is not easy to apply in reality. The determination of which costs are variable is a function of the jury. This means that pretrial

⁶ See also in *Bork (1978)*. Bork noted that while "[t]hese considerations do not demonstrate that price cutting could never under any circumstances be a successful method of predation," it was nonetheless "unwise, therefore, to construct rules about a phenomenon that probably does not exist," see *Kobayashi (2000:43)*.

⁷ According to the original article's findings, empirical research suggests that it is difficult to segregate cases of predation from tough competition (*Areeda and Turner 1975:711*).

discovery and the trial itself are often taken up with laborious and difficult issues of cost characterization and expert testimony on those points (*Calvani* 2000:6).

The third and latest period started with the 1989 decision of the Court of Appeals in *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.* The case involved a pricing battle between egg producers. The plaintiff's expert economist had testified at trial that the defendant's prices were below its average total costs and less than its average variable costs for a period of time. Moreover, the cost data were accompanied by executive comments evidencing predatory intent. Some of the more colorful ones included: "We are going to run you out of...business. Your days are numbered."⁸ Recognizing that application of a price/cost standard is "difficult business, the court stated that one should first consider the likelihood that the predator would be able to recoup its predation costs."⁹

Predatory prices are an investment in a future monopoly, a sacrifice of today's profits for tomorrow's. The investment must be recouped. "If a monopoly price later is impossible, then the sequence is unprofitable and we may infer that the low price now is not predatory. More importantly, if there can be no "later" in which recoupment could occur, then the consumer is an unambiguous beneficiary even if the current price is less than the cost of production. Price less than cost today, followed by the competitive price tomorrow, bestows a gift on consumers. Because antitrust laws are designed for the benefit of consumers, not competitors..., a gift of this kind is not actionable"¹⁰ Because determination of likelihood of recoupment is easier than undertaking the price/cost characterization and comparison, the court held that trial courts ought to undertake the recoupment analysis first. If recoupment is implausible, then one need not undertake the laborious price/cost exercise.¹¹ "Market structure offers a way to cut the inquiry off at the pass, to avoid the imponderable questions that have made antitrust cases among the most drawn out and expensive types of litigation. Only if market structure makes recoupment feasible need a court inquire into the relation between prices and cost."¹²

Recoupment is a necessary but insufficient element of the plaintiff's case. The court went on to state that intent ought play no role in assessing whether conduct is predatory (*Calvani* 2000:7). Several reasons support that conclusion. "Firms 'intend' to do all the business they can to crush their rivals if they can... Rivalry is harsh, and consumers gain the most when firms slash costs to the bone and pare price down to cost, all in pursuit of more business... Entrepreneurs who work hardest to cut their prices will do the most damage to their rivals... If courts use the vigorous, nasty pursuit of sales as evidence of a forbidden 'intent', they run the risk of penalizing the motive forces of competition."¹³

This approach was again applied by the U.S. Supreme Court in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.* The case involved allegations of predatory pricing by Brown & Williamson against a smaller rival in an effort to discipline the pricing of generic cigarettes. The case is important for several reasons. The Court noted that predatory pricing was generally implausible. A few years earlier, in *Matsushita Electric Industrial Co. v. Zenith*

⁸ *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.* (1989:881, F.2d at 1398)

⁹ *ie. 881, F.2d at 1400*

¹⁰ *ie. 881, F.2d at 1401*

¹¹ "It is much easier to determine from the structure of the market that recoupment is improbable than it is to find the cost a particular producer experiences in the short, middle, or long run (whichever proves pertinent)" *i.d.*

¹² *ie. 881, F.2d at 1401*

¹³ *ie. 881, F.2d at 1402*

Radio Corp., the Court had accepted the economic approach to the question of recoupment by quoting *Easterbrook* (1981:263): "...the short-run loss is definite, but the long-run gain depends on successfully neutralizing the competition. Moreover, it is not enough simply to achieve monopoly power, as monopoly pricing may breed quick entry by new competitors eager to share in the excess profits. The success of any predatory scheme depends on *maintaining* monopoly power for long enough both to recoup the predator's losses and to harvest some additional gain. Absent some assurance that the hoped-for monopoly will materialize, *and* that it can be sustained for a significant period of time, the predator must make a substantial investment with no assurance that it will pay off."¹⁴

The Court in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.* also held that plaintiff must prove the likelihood that the alleged predator will be able to recoup the losses associated with its predatory pricing later. The Court reasoned that the unsuccessful predator (the firm that prices predatorily but is unsuccessful thereafter raising prices above a competitive level) does not present an antitrust issue. While that firm may have made life miserable for firms within the market, consumers reap the benefit. Below-cost pricing may impose painful losses on its target is of no moment to the antitrust laws if competition is not injured: It is axiomatic that the antitrust laws are for the protection of *competition*, not *competitors*.¹⁵

We can conclude that, *while predatory pricing remains actionable under U.S. federal law*, the current caselaw is quite skeptical of the theory generally. On the one hand, *it is rarely tried and even more rarely successful*. On the other, the costs of inappropriate intervention are particularly high since consumers are denied the benefits of tough competition. Current law accepts the cost/price tests suggested by Professors Areeda and Turner, which are not easy to satisfy. Moreover, the recoupment requirement imposed by the Court in *Brooke Group* requires plaintiff to demonstrate that there is a likelihood of recoupment before going forward. The universe of actionable cases in U.S. federal courts may not be a null set, but it is not large. Consumers are the beneficiaries of this change in the law (*Calvani* 2000:10).

Predatory Pricing Cases in the EU with Respect to the Effects of the Areeda-Turner Principles

Allegations of predation also featured in the more recent *Microsoft* cases both in the EU and the US. It has usually something to do with *special price cutting as a part of dominant firm's* market strategy. Price competition involving price cutting or discounting is a normal part of competitive business behavior. Predatory pricing involves a policy of price-cutting by a dominant firm *designed to eliminate competition* so that *the firm may reap higher profits at a later stage* by charging higher prices once a competitor has been eliminated. In order to be successful this requires entry barriers to keep prevent new entry since otherwise it would not be possible for the predator to raise prices once its rival has been eliminated.

The Areeda and Turner arguments meant to emphasize that predation only arises when prices are held below marginal cost. Recognizing that, in practice, measuring marginal cost

¹⁴ i.e. 268

¹⁵ This statement later became a kind of paraphrase of saying that the very basis of any competition law were to defend competition not competitors.

may be extremely difficult, they argued that average variable costs could be used instead. *The Areeda-Turner rule is designed to restrain firms pricing behavior as little as possible reflecting the authors' view that predation is a rare phenomenon.* It is therefore arguably overly restrictive. Nevertheless it has had interesting adverse influence on the Commission and Courts in the EU. These rules became a special test on the basis of which predation could be proofed without any serious considerations to other necessary requirements to establish a predatory case (recoupment, for example).

The Areeda-Turner test was first applied in AKZO. In the resolution of this case, in December 1985, 10 million ECU fine was imposed on AKZO Chemie BV, a Dutch multinational chemical company for predatory pricing as an abuse its dominant position. The appeal was rejected in 1991. As for the facts, in the EEC organic peroxides market AKZO applied a policy of selective and below-cost price cutting designed to damage a small UK producer, ECS Ltd. to exclude it as a competitor. It can be seen from the Court's judgment that the explanation of the cost-based test adopted in the case differs from that of Areeda-Turner's. According to the court's reasoning, prices below AVC "must be regarded as abusive", because there could be no profit-maximizing reasons behind them. The only explanation for them is that they are aimed to eliminate competitors.

The Commission found that AKZO was dominant in the organic peroxides market as a whole and had infringed Article 82 by pursuing a course of predation against ECS designed to drive it from the plastic sector. The Commission decision finding predation focused in AKZO's threats and its eliminatory intent. The decision did not adopt the Areeda-Turner rule or lay down specific rules about the point at which low prices become predatory and abusive. It suggested that even prices above ATC could be predatory. AKZO appealed to the Court, and it accepted its arguments that some costs which the Commission had classified as variable were, in this case, fixed.

The test in AKZO can be summed up as follows:

1. Prices below AVC are presumed to be predatory.
2. Prices above AVC but below ATC are not presumed predatory but are predatory if they are part of a plan to eliminate a competitor.

Since the ECJ decision on the AKZO case issued in 1991, it has become not just on the guiding rule in predatory cases for competition authorities and courts but has become a subject of severe criticism from many economists.¹⁶ But it was reaffirmed in TETRA PAK II and followed and applied by the CFI in France Télécom.

The Areeda-Turner test, as a cost-based criteria, are problematic. In this case, parties submitted very different calculations of AKZO's costs. The Court stated that a certain item in the cost list is not fixed or variable by "nature", and overruled the Commission's classification of the labour costs as variable rather than fixed. However, the Court did not give guidance on how costs are to be allocated in multi-product firms. For example, the Commission classified advertising costs as variable rather than fixed, although AKZO insisted it to be.¹⁷

The Court did also rejected any other explanations for pricing under AVC: for example the launch of new lines, obsolete stock clearance, or using continuous production facilities (*Jones and Sufrin 2007:450*). It may be better for a firm (even one in a dominant position) to

¹⁶ On the earliest critics is *Phlips and Moras (1993)*.

¹⁷ The matte was ruled against AKZO only on the grounds of technicalities.

sell temporarily at a loss and make some return than to make none at all. In paragraph 71 the Court set out that circumstances like these are possible but not recognized any of them. In AKZO rules, the intention of the dominant firm became a crucial factor when prices are between AVC and ATC. The Court recognized that pricing at this range can be rational and non-predatory in certain circumstances. Ruling out all of these possibilities the Court laid out the test of intentions. According to that test, if the pricing behavior were a part of a plan intended to exclude deliberately and systematically a competitor from the market, that it is a sufficient proof of predation.¹⁸

In AKZO, the Court did not address expressly the issue of recoupment. In the US, courts do not find predatory pricing unless the plaintiff would be able to demonstrate that the alleged predator had a serious probability to recoup its investments in below-cost prices. This rule comes from the *BROOKE GROUP* (1993) in which the Supreme Court stated that even if the plaintiff can show below-cost prices and a predatory intent, there will be no antitrust violation. The position concerning the issue of recoupment in EC law is different. The principle laid down in AKZO and was confirmed in TETRA PAK II. Originally, the Commission did not find that Tetra Pak had had a reasonable chance of recoupment but the Court said that the Commission did not have to prove that Tetra Pak could recoup.

The AKZO-case has been dominating the predatory pricing cases since in the EU. The AKZO-rules state that if the costs of a dominant firm

- during a certain period of time has been set below the AVC, or
- the price was set above the AVC but below the ATC and the predatory intent has been proved

then it has to be a proven case of predatory pricing without any further considerations, including recoupment as well. Commission ruled on that principle in several similar cases involving dominant integrated telephone companies providing access to their network for its competitors (the alternative ADSL-providers) and ADSL service to the costumers. Three major cases are to be mentioned: *Deutsche Telekom*, *France Telecom*, and *Telefonica*.

In 2007 both the Commission and the Court maintained that approach. The Court of First Instance approved the former Commission's decision in the France Telecom case in January, and the Commission decided in the Telefonica case in June. Since then the Commission has been threatening several national incumbent telephone companies to launch investigation against them for similar exclusionary behaviors. In this paper I examine the question that whether the use of the AKZO-rule in exclusionary dominant cases can be substantiated by economic effects of the alleged abuse and harming the consumer in the short run as well as in the long run.

In its Wanadoo decision of 2003, the European Commission applied the AKZO test and explicitly rejected the notion that recoupment of losses should be part of the test for predation. The Commission's approach was upheld by the Court of First Instance. Although many commentators considered this was inconsistent with contemporary economic theory and unnecessarily diverged from the analysis under US antitrust law, the Commission's Staff Discussion Paper of 2005 maintained that separate proof of (the possibility of) recoupment

¹⁸ In AKZO, the predation intentions were derived partly from company documentation but it leaves a huge uncertainty for dominant firms how to be advised to be more careful in what they record. In WANADOO, the Commission relied firmly on a number of internal documents to indicate that the dominant firm lowered its prices in order to 'pre-empt' a developing market. That was what the Court thought to be incriminating words.

was not required to find an abuse. Against this background, *the Commission's Guidance appears to propose a blend of old and new theories*. The Commission indicates it will generally intervene where a dominant firm engages in predatory conduct “by deliberately incurring losses or foregoing profits in the short term ... so as to foreclose, or be likely to foreclose, one or more of its actual or potential competitors with a view to strengthening or maintaining its market power, thereby causing consumer harm” (*Janssens 2009*).

Despite the outpouring of academic writing in the area of predatory pricing in the last thirty years¹⁹, the courts on both sides of the Atlantic have remained adverse to new developments in economic theory in this area. It seems that *AKZO* (in Europe) and *BROOKE GROUP* (in the U.S.) remain applicable despite their evident shortcomings in terms of the below-cost test. Although it seems that in both cases the same test was applied, the consequences to future cases were quite different. In US, after *BROOK GROUP*, plaintiffs have become more reluctant and cautious to bring a predatory case in the Court. At the same time, however, since *AKZO* Commission has become more and more active to try predatory pricing cases, on the basis of the *AKZO* rules. How could that happen? Is it because in the EU, economists seem to have much less influence on the Courts than in the US? Yes, I think that could be one part of the answer. But the economic theory itself is not that clear on the subject.

Lawyers and judges have rarely been as dependent on economic theories to substantiate their arguments as in the area of predatory behavior; but given that the characteristics of predation – and indeed its very existence – are fiercely debated among economists, it is no wonder that the legal community has been puzzled, and at times misled, by the numerous economic theories (and intense ideological activism) in this area. Can lawyers really be blamed, when economists suggest diverging or even flatly contradicting theories about predatory pricing? (*Ritter 2004*)

Alternative Tests Used in Predatory Cases

The economic literature provides a few suggestions how to test an alleged predation which can be used instead of the *AKZO*-rules. *Joskow and Klevorick* (1979) suggested a modification of the ATC test that requires the existence of structural preconditions as a first-stage filter. The first set of factors to be examined include proxies for market power, such as the predator's market share, the size of other firms in the market, the stability of market shares, the predatory firm's profit history, and the residual elasticity of demand. The second set of factors to be examined are proxies regarding conditions of entry into the market. The third step would be to examine generally the dynamic effects of entrants on the market conditions. If the structural analysis suggests little danger of successful predation, *Joskow and Klevorick* would preclude plaintiffs from pursuing such cases. In cases where the first stage analysis suggests that predatory harm is possible, a price below AVC would be a sufficient but not necessary condition to find predation. In general, *Joskow and Klevorick* advocate a presumption of illegality for prices below ATC. Prices above ATC would be presumed legal unless the price cut was reversed within a reasonable period of time (for example, two years) (*Kobayashi 2000:29*).

In an early article, *Baumol* (1996) notes that AVC is not well defined. *Baumol* would use average avoidable costs (AAC) as the price floor, where AAC are defined to include variable

¹⁹ For an outlook, see for example *Niels and Ten Kate* (2000).

costs and all fixed costs that are not sunk. Because a firm can minimize its losses by exiting whenever prices are below average avoidable costs (AAC), prices below AAC necessarily involve a profit sacrifice. AAC, and not marginal cost, will also define the shut down point for an equally efficient rival. Thus, prices above AAC will not exclude an equally efficient rival, while prices below AAC will be exclusionary.

Bolton, Bradley and Riordan (2000) suggest a two tier test which would examine five elements. In the first tier, the plaintiff must prove: (1) a facilitating market structure; (2) a scheme of predation and supporting evidence; and (3) probable recoupment. Only if the plaintiff proves these three elements would the inquiry proceed to examine (4) whether price exceeded cost and (5) the absence of a business justification or efficiencies defense. While these elements are consistent with the traditional antitrust analysis of predatory pricing under *BROOKE GROUP* (see discussion below), each stage of this analysis can be accounted for any of the modern strategic predation models. For example, the first stage analysis could incorporate reputation models of predation by creating a presumption of high entry and reentry barriers based on an incumbent's past reputation as a predator. Strategic theory would also allow the plaintiff a menu of alternatives as a basis for proving a scheme of predation. In addition, a coherent strategic theory supported by evidence would allow courts to apply a less demanding standard when assessing the probability of recoupment. With respect to the cost test, Bolton, et al. would adopt Baumol's AAC benchmark, or use long run average incremental costs (*Ordover and Saloner 1989*).

Others have attempted to devise tests that would go beyond the cost based rules in an attempt to detect above-cost, but strategic, pricing. Instead of relying on the static relationship between price and cost to define predation, these authors use the intertemporal price pattern of a firm engaged in strategic pricing to devise a rule against predation. These tests would allow aggressive pricing by the incumbent firm, but would seek to punish attempts to recoup the sacrifice of profits by making any price cuts "quasi permanent". Because the potential predatory firm would be required to suffer the losses of non-compensatory price cuts or output expansions over the longer period defined by the rule, such a rule would increase the costs of predation (*Kobayashi 2000:31*).

Edlin (2002) proposes a rule that would prevent an incumbent from reducing prices in response to entry accompanied by a substantial price discount. Limiting the rule to "substantial" price discounts would prevent weak entry. In addition, he argues that such a rule will better control above-cost exclusionary limit pricing, and will give better incentives for incumbents to lower their pre-entry price.

Elhauge (2003) notes that these dynamic predation rules that would restrict the incumbent's ability to react to entry are likely to be futile and harmful. Specifically, incumbents' reactions to entry may be a normal and pro-competitive response when such entry will undermine an output maximizing competitive schedule of discriminatory prices. Even in the absence of competitive price discrimination, Elhauge shows that such rules can decrease both productive efficiency, and consumer welfare. Moreover, such rules are not well formulated to operate in real world markets, and would have unavoidable implementation difficulties. These difficulties include the lack of well defined price floors and ambiguities in defining when entry or exit occurs. In addition, it is possible that these rules could increase the credibility of a multi-market predator and may serve to increase the probability that predation or entry deterrence is successful.

Lang and O'Donoghue (2002) expressed some cautions against the strict requirement of recoupment. It is often difficult to prove what a dominant firm could do successfully at an unspecified time in the future. In order to do that, it would be necessary to show that there would be no entry by more competitive and determined rivals, when the dominant firm increases its price. It would also be necessary to show that price of the product is inelastic in a sense that, although buyers were accustomed to low prices but they would be willing to pay significantly higher prices in the future.

We can agree with *Areeda and Hovenkamp* (2006:323) in the notion that “no shortage of theories, but a frightening inability of courts to assess them.” In the past two decades, scholarship on the economics of predatory pricing has evolved from the relatively settled consensus in which predatory pricing was thought to be irrational, rarely tried, and even more rarely successful, to a point where much less is settled. Recent theoretical work emphasizing strategic theory has shown that predation can be rational, and empirical studies have presented evidence consistent with successful predation. However, the literature's response to predatory pricing, a relatively administrable and permissive rule based in part on the assumption that successful predation was rare, has remained relatively intact. While the recent economic literature may have eroded this basis for the adoption of permissive standards for predatory pricing, other reasons for adopting such a rule, based on the benefits of bright line rules that would be administrable by courts, still remain.

The France Télécom (Wanadoo) Case

In January 2007, the European Court of First Instance (CFI) handed down an antitrust Judgment in the case of *France Télécom SA v Commission* (France Telecom), addressing a number of issues relating to predatory pricing in the EU. By that ruling, an extremely strict and approach to EU law on predatory pricing has been confirmed. The CFI has declined to reject the Commission's form-based 'legal' approach instead of a more effects-based analysis. This case was not helped by unhelpful internal documents and the inability of the parties to explain them away at trial.

For firms which may have market power, the road ahead remains fraught with difficulties, particularly in relation to how they respond to aggressive competition. It is essential that clear contemporaneous evidence of legitimate business practices are kept and that documents which are liable to mischaracterisation (or worse) are not created.

While the calculations of prices and costs in the case were complicated by the particularities of the communications sector, the judgment provides guidance across all sectors. In particular:

- The European Commission (the “Commission”) has a broad discretion in selecting the appropriate accounting methodology. The onus rests on the applicant to show that the methodology adopted by the Commission is unlawful, and that its adoption amounts to a manifest error. It is not enough that another methodology was a credible alternative. The CFI's deference to the Commission's discretion in this regard has disturbing echoes to the approach it used to take in relation to the importance of economic assessments in antitrust cases.
- Where there is evidence of a strategy and/ or intent to foreclose, a dominant entity has no absolute right to match its competitors' prices.

- All presentations by/documents from management will almost certainly be reviewed by a regulator looking for signs of predatory intent.
- The fact that recoupment of losses is unlikely is no defense.
- However, it may be a relevant factor in considering whether there was an intention to predate.

In its 16 July 2003 decision, the Commission found that Wanadoo Interactive SA (“Wanadoo”) had infringed Article 82 EC by charging predatory prices for its eXtense and Wanadoo ADSL services that, until August 2001, did not enable it to cover its variable costs and, after August 2001, did not cover its total costs, as part of a plan to pre-empt the market for high-speed Internet access during a key phase in the development of the market.

France Télécom appealed the Commission’s decision, claiming the Commission had *inter alia*:

- applied a cost recovery test that was contrary to Article 82 EC both in relation to the costs taken into account and the methodology;
- taken an approach which denied France Télécom its fundamental right to align its conduct to that of its competitors; and
- made errors of law and manifest errors of assessment in finding that France Télécom had a plan of predation and that it was not necessary to prove that France Télécom had recovered its losses.

In this judgment, the CFI considered the cost recovery test applied by the Commission, and the methodology on which the finding of abuse rested. Having observed that the Commission must be afforded a broad discretion for complex economic assessments, the CFI reviewed the Commission’s approach to calculation of both average variable and average total costs. The Commission accepted that, in an embryonic market, where customer acquisition costs represent a substantial proportion of expenditure, a provider cannot immediately recover its full costs. It therefore considered whether the revenues covered adjusted costs.

The CFI found that the Commission’s calculation of costs, including its decision to spread customer acquisition costs across the estimated minimum subscription period, was appropriate, even though France Télécom itself did not depreciate the relevant expenditure in this way. Further, the CFI found that the Commission had correctly not taken subsequent reductions that were not foreseeable at the time of the alleged abuse into account in assessing recurrent costs at the time of the alleged abuse.

Finally, in relation to determining the appropriate methodology for calculating costs, the CFI considered France Télécom’s argument that the only appropriate costing methodology was discounted cash-flows, noting that it is not enough to show that an alternative methodology could be appropriate, France Télécom would have had to show that the Commission’s use of depreciated assets and costs was unlawful. France Télécom failed to do so.

In considering France Télécom’s claim that the Commission’s finding of predation had deprived France Télécom of the ability to meet its competitors’ prices, the CFI found that a dominant entity has only a limited right to do so. The CFI noted that the only previous Judgment of the Court which described such a right referred to matching prices only in respect of a particular customer, not across the board. Further, the CFI noted that that

previous Judgment had not ruled on the questions as to whether it is lawful to align prices where doing so would involve pricing below cost.

In considering precisely that question in this case, the CFI stated that a dominant undertaking cannot be permitted to take steps to protect its commercial interests if its purpose is to strengthen its dominant position. As a result, a dominant entity has no absolute right to align its prices to those of its competitors. Even if to do so is not in itself abusive or objectionable, it might become so when it is aimed not only at protecting its interests but also at strengthening and abusing a dominant position. As such, the CFI is sending quite clear signals that it will read the “meeting competition” defence narrowly.

In assessing the sufficiency of the documents relied on by the Commission to establish that there was a predatory plan sufficient to show predatory intent, the CFI noted that the impugned documents were from management-level staff and related to formal presentations and a detailed framework letter related to the decision-making process for France Télécom’s business. In this respect, the Commission’s tough approach to exclusionary abuses has been reinforced.

France Télécom submitted that if a dominant entity cannot reasonably expect to reduce long-term competition with a view to recouping its losses, it is not rational for that entity to engage in predatory pricing. In essence, it argued that unlikely recoupment of losses was a defense to predatory pricing. The CFI, referring to the Judgment of the Court of Justice in *Tetra Pak II* reaffirmed that proof of recoupment is not a pre-condition to a finding of predatory pricing. However, the CFI’s parting words regarding recoupment could be construed as implying that recoupment may be relevant in considering whether there is a plan to eliminate competition. It may be that the Commission needs to nuance the language in paragraph 122 of its discussion paper on the application of Article 82 EC to exclusionary abuses to reflect this potential evidentiary role for the likelihood of recoupment.

Mazák Standings on the Case

Advocate General *Mazák* has issued a call for less aggressive use of predatory pricing in his Opinion of 25 September 2008 relating to the France Télécom decision where the Commission found that the appellant charged predatory prices below variable costs (AVC) until August 2001, and above AVC but below average total cost (ATC) from August 2001 onwards, as part of a plan to pre-empt the market in high-speed internet access during a key phase in its development.

Essentially the appellant should win on following grounds:

- 1) CFI failed to state reasons when commenting on a dominant firm’s right to align prices
- 2) CFI failed to state reasons why recoupment need not be shown
- 3) Likely recoupment must be demonstrated by the Commission in predatory pricing cases
- 4) In addition the *Mazák* also said that in his view a dominant firm should, on occasion, be allowed to align its prices with those of competitors.

The CFI ruled that the firm’s conduct was predatory (below AVC for a period and between AVC and ATC with intention for another period). Therefore the pricing fell squarely withing the *AKZO* rules. So the behaviour is in itself abusive. Accordingly there was no need for the CFI to assess the formulation. In line with Community case-law, the Commission regarded

as abusive prices below average variable costs. In that case, the eliminatory nature of such pricing is presumed. In relation to full costs, the Commission had also to provide evidence that France Télécom's predatory pricing formed part of a plan to 'pre-empt' the market. In the two situations, it was not necessary to establish in addition proof that France Télécom had a realistic chance of recouping its losses.

That all was a mistake, said Mazák. The Advocate General is calling for a major change in the law on below cost pricing, by placing a greater focus on the impact on consumer welfare and less on the economic freedom of market participants. The problem is that the case law which seemingly creates the basis for this shift does not support it. AKZO and Tetra Pak 2 are clearly cases where the dominant concern is the preservation of rivalry, of a competitive process. The radical change called for here should be made by advising the Court to change its approach rather than by asking the court to reinterpret its case law.

What can Economists Accomplish?

Realizing the problem initiated by the courts inability to assess complex economic theories, OECD held a Roundtable discussion on the subject in 2008 (*OECD 2008*). As a result, they concluded in several suggestion on the matter, which could, by all means, serve this paper as conclusions. In order to make courts to be able to handle economic theories during a deliberation of a case, competition authorities (including the European Commission itself) should

- recognize that maximization of consumer welfare is best achieved by a competition policy centered on the analysis of the likely effects of firms' conduct. It also acknowledges that effects analysis should be solidly grounded in economics. The growing acceptance of the importance of economics has been reflected not just in the enforcement practice of national competition agencies but also in the attitude of the courts. In particular, there have been increasing demands for substantial economic support for arguments advanced in a competition law context. By developing an enforcement culture based on economics at the level of the national competition authorities one encourages the acceptance of economic methodology by the courts;
- support was voiced for educating judges in economics and economic methodology. Such training represents a positive way to develop the judges' analytical skills. Given that in some jurisdictions judges may not understand the economics of the government's case and may seek out some procedural resolution in order to dispose of the case in a manner that does not require them to deal with the actual substance of the case, it is imperative that judges should be encouraged to become more sophisticated in competition economics. At the same time, judges should be informed of the limitations of economic evidence and that one that can rarely depend on uncontested data to produce a single numerical "solution" to a given problem;
- in terms of effective techniques for the presentation of complex economic evidence, it is essential that the evidence be presented to the court in a way that is credible, simple and well-supported by the facts before it. The challenge here for the competition authorities is to present economic reasoning in an understandable but not less precise way to non-experts, that is, judges. In order to ensure comprehensibility, the problem at issue should be clearly identified, and any economic argument should be put forward in such a way as to allow the reader or listener to easily follow it.

- Inform the court of any assumptions relied upon as well as the reasons for determining parameters. Furthermore, advocates for the authorities should be ready to explain why other assumptions or parameters were not used. It is important to know and explain at trial the limits of the data that is relied upon. Any economic conclusions that are advanced at trial should be based on relevant facts and should draw on established economy theory (*OECD 2008:8–10*).

If competition authorities indeed share these views and act accordingly, cases to be presented to the courts will definitely be more grounded with the solid base of economic theory, which is the ultimate reason why we have competition laws at all. In the cases of predation, AKZO rules shall be replaced by more sophisticated complex economic tests in the future.

The Need for Objective and Predictable Standards

As an economist, I cannot agree more with the conclusion of the previous section. But unfortunately, the views of an economist are not the only relevant views concerning predation. Let me finish this paper with some comments on the subject partially on a personal level. The importance of this issue will be evident to anyone who has had experience counseling a corporation that may be subject to an allegation of predatory pricing. That counselor's perspective is very different than that of a scholar or a government decision maker.²⁰ Someone who works inside a company or advises a company may have to decide very quickly whether the company can legally cut a price, and if so, how much. There is not enough time to do complicated economic studies. There is not enough time to do a massive file search to see whether there are "bloodthirsty sentiments expressed somewhere in the bowels of the company"²¹. There is not enough time to recast the company's accounting system in order to accommodate the most sophisticated and nuanced expressions of an Areeda-Turner test.

Leary developed a simple test which could have farer reaching consequences. One practical approach, Leary suggested, was to ask business people inside a company whether they expected "to make any money" under the newly proposed prices. And if they asked "by what standard," we would say by "your standard". The question is "do you anticipate that you are going to make any money, as you understand it, at this price?" If the answer was yes, then that may be enough. If the answer was no, then the next question is "why are you doing it?" That might yield some interesting answers. Based on his experience, we may have some presumptive standards which can be applied prospectively (*Leary 2001*).

If we had to go beyond the cost-based standards, we can use the proposed test that the court addressed in *American Airlines*. This proposed test would require a determination of "whether the incumbent had clear alternatives that the incumbent knew or could reasonably be expected to have known would have made it more money absent any predation profits", *American Airline* (...). What does that mean? As soon as there is new entry or some kind of price action by a competitor, the profit maximizing price of the dominant firm or any firm will change. And the profit-maximizing price continues to change depending upon what

²⁰ I have had the pleasure of being in all of these positions (fortunately not at the same time).

²¹ This quotation comes from Thomas Leary, a former Commissioner of the Federal Trade Commission. The views expressed here are mainly his but I totally agree with them, see *Leary (2001)*.

that competitor or other competitors do with their prices, and depending upon how much business they capture. *As a practical matter, the market's adjustment to a new equilibrium is likely to be an iterative process.* If a plaintiff or a prosecutor were to claim that any price below this constantly changing profit maximizing price is presumptively suspect, that would not only be impractical but also anticompetitive (Leary 2001).

Another issue concerning whether the dominant firm can, at the least, meet competition. What is the established firm supposed to do if there is a new entrant building its market share? Is it supposed to continue charging its profit-maximizing price on the assumption that the old competitive equilibrium still exist? Is there some kind of a market position that it has to give away to a new competitor? Is there any solid grounds on which it would be legally required to give away the new competitor a certain amount of market share? And even there were, how could we expect that a dominant firm could fine tune its market responses on that assumption.

Conclusion

As long as the AKZO rules will remain the decisive basis for ruling in predatory (exclusionary) pricing cases, you can tell several reasonable advises as a consultant to a dominant company based on the doubts and questions raised in this paper but it would probably not serve the best interests of the firm. You could discuss with your company each of the innovative proposals that have been proposed as alternatives or supplements to the traditional cost-based tests for predation. But the AKZO rules not only prevailing in the EU but much more simple and easier to follow than any other alternative test.

There are very serious theoretical and practical problems that will arise if we abandon objective cost-price tests that companies can apply up front. We should recognize that these tests may have to be modified or refined before to apply but it is worth the effort to do so. But the only hope of changing the prevailing dominance of the AKZO test is that a dominant company will apply different approaches acting more aggressively with prices and will successfully be able to defend its behavior against the Commission and/or the Courts. Until then, the practical advises could go like these: be aware of your AVC all the time, keep your accountants knowledgeable about the different ways to calculate variable costs, do not set out your competition strategy expressly aimed against any of your competitors, and try to keep your prices very close to the AC. Does it seem rational to any one? Of course not but nor does the existing legislation in the EU concerning predatory pricing.

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