

**CONTEMPORARY
ECONOMIC AND LEGAL ANALYSES
OF
PREDATORY PRICING**

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Yoon San Wong

University of Canterbury

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Abstract

Over the last decade the market-driven economic philosophies of successive New Zealand governments have transformed the structure of the economy. These changes have established favourable market conditions for the success of a particular type of anticompetitive organisational behaviour, predatory pricing. From the mid-1950s to the early 1980s, economic analyses of predatory pricing theories frequently concluded that this behaviour constituted economically irrational behaviour. This conclusion generated a widespread scepticism among antitrust commentators, policy-makers and judges towards the prevalence of such behaviour. Recently, however, the basis for this conclusion has been undermined by the application of Game Theory to predatory pricing. Game-theoretic analysis has proven that predatory pricing is rational under a range of market conditions and consequently, issues regarding the need for prohibition and the optimal method of proscription have again become relevant.

This research investigates the contemporary developments in economic and judicial analysis of predatory pricing in order to evaluate the efficacy of section 36 of the *Commerce Act* 1986 in prohibiting this behaviour. A comprehensive survey of the game-theoretic predatory pricing models concludes that these models refute a number of well-known irrationality arguments and that predatory pricing cannot be regarded as irrational organisational behaviour. Prominent standards proposed in the literature for the existence of predatory pricing are then shown to be deficient in light of the insights provided by the application of game theory. A critique of the most recent predatory pricing cases decided by the United States Supreme Court, the Court of Justice of the European Economic Community and the Australian Full Federal Court is then conducted and it is found that the form and content of the standard for any jurisdiction must be dictated by the specific objectives of the competition law legislation. Finally, the research concludes that, in all but one respect, the current drafting and judicial interpretation of section 36 enables the section to be effective in proscribing those types of predatory pricing which are inimical to the attainment of the objectives of the *Commerce Act*.

PART I

Introduction

Introduction

1 Overview

Since 1984, the pervasive market-driven economic philosophy of successive New Zealand governments has transformed the structure of the economy. Numerous State Owned Enterprises have been privatised and associated with this change in ownership has been a shift in organisational focus; maximisation of shareholders' wealth is now the primary goal.

A process of deregulation was implemented concurrently with the privatisation programme and sought to introduce competition into previously protected markets. Theoretically, the process of competition, underpinned by the motive of profit-maximisation, should foster innovation, improve productive and allocative efficiency, reduce prices, promote quality and generally advance the welfare of society. However, competition does not necessarily guarantee these outcomes since profit maximisation can also be pursued through price fixing, undesirable business acquisitions and other anticompetitive conduct (in the absence of any force deterring such conduct).

As a consequence of decades of government ownership and protection, the newly privatised organisations often inherited monopolies with vast resources. However, this was not the only legacy. While the artificial protection was dismantled during the process of deregulation, many of the privatised industries have found themselves in markets with significant natural barriers to entry. In addition, these organisations often have diversified product bases by virtue of the distinct product and geographic markets in which they sell, or because the controlling shareholders are organisations with separate products or geographic markets. These three elements—barriers to entry, large financial resources and access to multiple markets—provide the foundations for the success of a particular type of anticompetitive conduct called “predatory pricing”.

The term “predatory” is used in antitrust law and economics to denote any business conduct undertaken to “advance a firm’s position not through improving the firm’s performance in the market, but by reducing the competitive viability of actual or potential competitors.”¹ The phrase “predatory pricing” is a generic term which is applied to any business conduct which involves the deliberate setting of prices to eliminate and/or deter competition.² The classical case of predatory pricing involves a firm (the predator) pricing its products or services below its cost of production in order to impose losses on its rivals (the prey). These losses force the prey to exit the market and the resultant monopolistic position held by the predator allows it to price supracompetitively and receive profits in excess of those which it would have achieved had it not engaged in the predatory conduct.

Theoretically, predatory pricing poses a threat to society. By subverting the competitive process, it prevents the benefits of competition from being obtained. Consequently, consumers pay higher prices, resources are misallocated, innovation is stifled and incentives to improve productive efficiency and quality are eliminated. In addition, predatory pricing endangers a range of societal values including the right to trade, freedom of choice and an equality of wealth distribution. However, the fact that predatory pricing can theoretically be detrimental to society, does not imply that it need be proscribed. If the conduct were never performed, no harm would accrue.

From the mid-1950s to the early 1980s, a number of commentators applied the analytical tools provided by microeconomic theory to the behaviour of predatory pricing and concluded that this behaviour was economically irrational.³ As a result, they argued that predatory pricing would not be employed by organisations. The logic of these commentators was so persuasive that a scepticism was instilled in the minds of many

¹ Gundlach, G.T., “Predatory Practices in Competitive Interaction: Legal Limits and Antitrust Considerations.” *Journal of Public Policy and Marketing*, 9, 1990, 129-153, at 129.

² Eisenberg, J., “Predatory Pricing in the Context of Australian and New Zealand Competition Law.” *Competition Review*, 4, 1991, 1-42, at 2.

³ In relation to producers, economically rational conduct is any set of actions undertaken for the purpose of maximising long-run profits where the actions are profitable, feasible and no other set of actions would achieve the same effect and be more profitable (Ordover, J.A. & Saloner, G., “Predation, Monopolisation, and Antitrust.” In Schmalensee, R. & Willig, R.D. (eds.), *Handbook of Industrial Organisation*. Amsterdam: Elsevier Science Publishers, 1989, 537-596, at 544-545).

legal commentators, practitioners and judges regarding the rationality of predatory pricing. This scepticism has continued to abide within the legal community.

However, the basis for this scepticism has recently been undermined by the discrediting of the proposition that predatory pricing constitutes irrational behaviour. The irrationality arguments are grounded in an age when the analytical tools provided by microeconomic theory were required to make assumptions about certain aspects of reality. The development of Game Theory has provided a new set of microeconomic tools which are able to explicitly model the features of reality which were unable to be incorporated by the less-advanced tools. By applying game theory to predatory pricing theories, some crucial and unrealistic assumptions underlying a number of the irrationality arguments have been highlighted and the profitability of predatory pricing in a number of new situations has been proven. As a result of these contributions, the debate over the likelihood of predatory pricing occurring in reality has been renewed and questions regarding the need for prohibition and (where it is considered to require illegalisation) the optimal method of prohibition are again relevant.

Although economic theory may now provide a legitimate reason for proscribing predatory pricing, in reality, proscribing this conduct has proven to be far from a straight forward task. The difficulty arises from the fundamental nature of predatory pricing—as price cutting, it exhibits the traits of vigorous price competition. For decades, judges and commentators have been vexed by the question: How can predatory pricing be accurately distinguished from desirable price competition? Many judicial standards for the identification of predatory pricing have been advocated over the years. The most widely received tests are cost-based tests. These involve comparing the predatory prices with some measure of the predator's costs. Since 1975, cost-based tests have been the subject of a great amount of judicial and academic commentary. As a result, there is little which is not known about their characteristics and, in particular, their efficacy in accurately identifying conventional models of predatory pricing. However, very little consideration has been given to the efficacy of these tests since the insights into the economics of predatory pricing were provided by game theory. The great significance of these developments to the rationality and plausibility of predatory pricing, means that this issue demands attention.

While the volume of commentaries on cost-based tests has been diminishing, a different test—termed the “recoupment test”—has recently been receiving an increasing amount of attention in both the courts and the law journals. The recoupment test examines the possibility that the predator will be able to recoup their predatory losses after the prey has been eliminated or deterred. Because this test is a relatively recent development, there exist many facets of its operation which are not fully understood and therefore the limits of its applicability are yet to be discovered. Again, there has been little or no discussion on the implications of game-theoretic analyses of predatory pricing for this test.

New Zealand law does not explicitly prohibit predatory pricing. Such behaviour is generally proscribed through the provisions of the *Commerce Act* 1986. In particular, §36 prohibits any person with a dominant position in a New Zealand market from using that position for the purpose of restricting the entry of, or eliminating, a person from any market or preventing or deterring any person from engaging in competitive conduct in any market. Given that an effect of successful predatory pricing will be the elimination of a competitor or the deterrence of their entry into a market, §36 would appear to be ideally suited to combating predatory pricing. However, such a conclusion may be unwarranted because of the possibility that firms could employ predatory strategies which would fall outside the scope of the section. If §36 provides effective protection to the range of possible predatory pricing strategies which warrant prohibition, then it can be concluded that there is no need for concern about the possibility of predatory pricing being employed by New Zealand organisations. On the other hand, if the current law is inadequate with regards to condemning such conduct, these loopholes will provide opportunities for the exploitation of consumers which is to the detriment of society in general.

2 Purpose and Value of the Research

The purpose of this thesis is to evaluate the efficacy of the *Commerce Act* 1986 in prohibiting unilateral predatory pricing in light of contemporary developments in economic and judicial analysis of this behaviour.

This thesis contributes to the subject of competition law in a number of ways. The first contribution derives from its contemporary focus. The application of game theory to predatory pricing is a new development which, to date, has been largely restricted to the economics literature. This is primarily due to the highly complex and theoretical nature of much of the game-theoretic predatory pricing literature. Nevertheless, this line of research has significant implications for the legal aspects of predatory pricing. This thesis attempts to promote a wider appreciation of the existence and value of game-theoretic predatory models by presenting the essence of these models in a non-technical manner. The practical implications of these models are also demonstrated by evaluating the efficacy of a number of historical and contemporary judicial standards proposed for the identification of predatory pricing in light of the game-theoretic models.

The second contribution of this thesis is that it represents the first comprehensive study of the issues involved in the prohibition of predatory pricing in New Zealand. The research is necessary because there exist interjurisdictional differences in the approach used to condemn predatory pricing. It would be unwise to implement foreign approaches in New Zealand without identifying the underlying reasons for the differences in approach. If these reasons are valid they may imply that the foreign approaches are inappropriate for the New Zealand environment and a unique approach is required. This thesis assesses the need for a unique approach.

Finally, this research is timely. It is conducted at a time when changes to the economy have provided supportive structures and incentives to engage in predatory pricing. Indeed, although no New Zealand court has, to date, been required to adjudicate on any substantive allegations of predatory pricing, the courts will not be deprived of this opportunity for very much longer.⁴ Consequently, it is necessary to

⁴ Predatory pricing allegations have been raised in at least two separate instances within New Zealand in 1994. In September it was reported that during the first half of 1994, New Wool Products Limited, a Nelson-based heating insulation manufacturer, brought a complaint before the Commerce Commission alleging that Insulation New Zealand Limited, a subsidiary of Carter Holt Harvey Limited, had engaged in predatory pricing within the Nelson market for heating insulation products in order to damage New Wool Products (Underhill, J., "Insulation War Sparks Predator Complaint." *The National Business Review*, 9 September, 1994, 4). New Wool Products went out of business in mid-October (McCarthy, L., "Price War Claims Victim." *The National Business Review*, 14 October, 1994, 3). At the close of this thesis, the Commerce Commission was still investigating the allegations.

know whether the current method of condemnation will provide adequate protection from this behaviour to the society of New Zealand.

In summary, the thesis involves a comprehensive study of the fundamental issues involved in the proscription of predatory pricing in New Zealand. By incorporating the most recent theoretical and legal analyses of this behaviour, the policy recommendations will be well grounded and should provide valuable assistance to scholars, practitioners, administrators and law-makers confronting these issues in the future.

3 Outline of the Thesis

The thesis is structured in five parts. Part I introduces the concepts of predation and predatory pricing and outlines the purpose and scope of the research.

Part II involves a comprehensive review of the economic aspects of predatory pricing. Chapter A investigates the question of whether, and by what means, predatory pricing behaviour can be said to harm society. After concluding that justified reasons exist for society to be concerned about the behaviour, the rationality of predatory pricing is analysed from a contemporary microeconomic perspective in chapter B. First, the logic of the more prominent irrationality arguments are briefly canvassed. Game theory is then introduced and a range of game-theoretic predatory pricing models are presented. Finally, the extent to which these models refute the irrationality arguments is discussed. Chapter C reviews a number of prominent tests which have been proposed for determining the existence of predatory pricing and discusses their efficacy and practicality in light of the developments provided by game-theoretic predatory pricing models.

Part III departs from the theoretical issues examined in part II and examines more practical issues. Chapter A examines the argument of certain commentators that

In October, allegations of predatory pricing were brought before the High Court. On behalf of Tasman Bay Pilot Company, the Commerce Commission brought proceedings against Port Nelson Limited alleging that, *inter alia*, Port Nelson had engaged in predatory pricing with regard to services for the piloting of ships into the port. At the close of this thesis, a judgment was expected to be given during February/March 1995.

the costs of proscribing predatory pricing would outweigh the benefits and therefore the conduct should be legal *per se*. It is concluded that there are no objective means of determining the validity of these arguments and that the balance of subjective opinion favours proscription. Chapter B comprehensively critiques the most recent predatory pricing cases decided by the Supreme Court of the United States,⁵ the Court of Justice of the European Economic Community⁶ and the Australian Full Federal Court.⁷ These case studies contribute to the purpose of the thesis in three major ways. First, identifying the current legal standards for predatory pricing employed in relevant overseas jurisdictions provides a basis for comparison with §36. Second, the cases studies provide an insight into the extent to which courts have adopted the game-theoretic developments and the methods they have used to incorporate these advances. Finally, a comparative examination of the standards employed in different jurisdictions highlights any differences in standards. Identifying the reasons behind any differences may prove instructive in deciding the optimal method of proscription in New Zealand if it is ultimately concluded that §36 is inadequate to proscribe predatory pricing.

Part IV directly examines the primary purpose of the thesis. Chapter A identifies types of predatory pricing which are inimical to New Zealand society. First the relevant objectives of the *Commerce Act* 1986 are identified. Then, both classical and contemporary predatory pricing models are evaluated against these objectives to determine which models should be condemned by the Act. Chapter B examines the three constituent elements of §36. A discussion is conducted on the manner in which each element would operate if any of the types of predatory pricing which had previously been identified as harmful in chapter A were alleged. This discussion allows the efficacy of §36 to accurately identify harmful predatory pricing to be evaluated. Building on the conclusions derived from the case studies in part III, recommendations are then provided regarding the standard which should be employed within New Zealand to identify harmful instances of predatory pricing. Finally, part IV presents the conclusions of the thesis.

⁵ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.* 1993-1 Trade Cases ¶70,277.

⁶ *AKZO Chemie BV v. E.C. Commission* [1993] 5 C.M.L.R. 215.

⁷ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.* (1992) A.T.P.R. ¶41-167.

4 Scope of the Thesis

Even the most cursory survey of the antitrust literature is likely to support the claim that more words have been written about predatory pricing than any other theory of anticompetitive conduct. Primarily since the mid-1970s, a vast quantity of literature has amassed on the subject and although the flood new publications has abated, there is no indication that the stream will ever dry up. In general, the literature on predatory pricing may be classified into three classes. The first, and probably largest class, is that body of articles and books which discusses standards for identifying predatory pricing. The second class consists of the numerous case studies which have been written on various predatory pricing decisions. The final class comprises that body of literature which is concerned with the rationality or otherwise of predatory pricing.

The great quantity of literature on predatory pricing makes it necessary to limit the scope of this thesis. Because so much has been written on the topic, some issues have been exhausted and there is very little which could be written on these topics that would be new and original. The thesis is therefore directed at the contemporary issues of predatory pricing where there exist some opportunity to contribute to the body of knowledge. Specifically, the thesis focuses on the game-theoretic predatory pricing models and the practical implications of these models. The literature discussing the efficacy of legal standards for testing conventional models of predatory pricing are not examined except where it is relevant to the discussion on the contemporary issues under examination.

Further limitations imposed upon this thesis arise from the types of behaviour which may be classified under the term “predatory pricing”. The term “predatory” is applied to a wide range of organisational behaviour.⁸ The common factor among types of predatory behaviour is its anticompetitive purpose. In contrast to the aggressive competitor who attempts to maximise long-run profits through greater efficiency, lower prices, better service, innovation and higher quality products, the predator seeks to

⁸ For a brief introduction to the various types of predatory conduct, see Gundlach, *supra* note 1.

impose losses on their competitors by raising their costs or forcing them to price below cost—it is the actual and potential competitors, rather than the consumer, which constitute the focus of predators' attentions.

Although the great majority of academic and judicial analysis has been directed toward predatory pricing, an increasing volume of literature is amassing on other predatory conduct. Product and process innovation, advertising and promotion, product introductions and design modifications, product pre-announcements and spurious litigation have all been suggested as potential predatory strategies which could be employed to raise rivals' costs. These types of non-price predatory behaviour are outside the scope of this thesis.

With regards to the different types of predatory pricing behaviour, the focus of attention is on *unilateral* pricing behaviour. Predatory pricing strategies can be engaged in by an oligopoly, however it is not generally considered the topic of concerted behaviour and it is beyond the scope of this thesis to consider any such extensions. The term predatory pricing also encapsulates “limit pricing” strategies. Limit pricing involves pricing above-cost to exclude competition and these strategies are themselves the subject of a substantial body of literature.⁹ Although it is necessary to briefly discuss limit pricing when considering the efficacy of §36 in proscribing predatory pricing, the limit pricing literature is not examined.

⁹ For a comprehensive survey and analysis of the various limit pricing strategies, see Gilbert, R.J., “Mobility Barriers and the Value of Incumbency.” In Schmalensee, R. & Willig R.D. (eds.), *Handbook of Industrial Organisation*. Amsterdam: Elsevier Science Publishers, 1989, 475-535.

PART II

The Economics of Predatory Pricing

CHAPTER A

The Competitive Concerns with Predatory Pricing

CHAPTER B

Predatory Pricing as a Rational Strategy

CHAPTER C

Tests for the Existence of Predatory Pricing

Introduction

Predatory pricing is an economic creature which has dwelled for over a quarter of a century within the domain of neoclassical economic price theory. This economic paradigm served as the solitary analytical framework for assessing both the social impact and rationality of predation¹ and the optimality characteristics of different tests for the existence of such conduct. However, this dependency may have been misplaced because microeconomic theory has evolved over the same period. The discipline of Game Theory has been developed specifically for the purpose of analysing the optimality characteristics of alternative courses of action (such as predation) where the result is dependant upon the actions of multiple entities. As such, game theory offers an alternative analytical paradigm—albeit one which is in the early stages of its life cycle—by which the economic aspects of predation may be evaluated.

This part comprehensively reviews and discusses the implications arising from the application of game theory to the subject of predatory pricing. It is structured in three substantive sections, each dealing with a distinct economic facet of predation.

Chapter A involves a brief discussion of why predation is harmful to society. Whilst this issue may appear trivial and the answer trite, it is of fundamental importance because the detriment caused by predation justifies social concern, and therefore, ultimately justifies the topic of this thesis. It is found that successful predation will be detrimental to a multitude of goals ascribed to antitrust legislation. This conclusion prompts the question: What is the probability that predation will be employed? This is the topic addressed in the second substantive section.

Chapter B examines the rationality of predation as a business conduct. If predation is irrational, it cannot be expected that rational decision-makers (such as those assumed to be directing organisational behaviour) will engage in such conduct. Where

¹ The words “predatory pricing” and “predation” are used interchangeably throughout the remainder of this thesis.

instances of predation are simply examples of commercial mistakes, proscription of such conduct is not warranted, because the harm will be self-inflicted and thereby self-detering. After presenting the logic underlying the widely accepted view that predation will rarely (if ever) be rational and therefore will not be prevalent, arguments derived from game theory will be presented to counter the logic of the accepted position. It is shown that certain fundamental assumptions of neoclassical price theory are critical to the accepted view. By replacing these assumptions with plausible alternatives and employing game-theoretic analytical tools, predation can be proven to be rational under a variety of environmental conditions. Setting aside any pragmatic difficulties involved, this conclusion that predation can actually be rational provides a theoretical rationale for proscribing predation.

Chapter C examines the means by which predation can be identified. This issue is examined from a novel perspective. A number of prominent tests with non-game-theoretic economic foundations have been proposed as methods for determining the existence of conventional models of predation. Their efficacy in accurately performing this task has already been the subject of extensive discussion in the literature and this debate is accorded no more than a cursory mention. Rather, in keeping with the contemporary theme of this thesis, an examination is conducted into the efficacy of these tests in identifying models of predation derived from game theory. It is concluded that the vast majority of the proposed tests are deficient in this regard.

A

The Competitive Concerns with Predatory Pricing

All business conduct falls within the sphere of interest of antitrust law. These laws were enacted to uphold certain values which presumably promote the well-being of society. In order to evaluate at a theoretical level whether society should be concerned with the business conduct of predation, it is necessary to identify those values protected by antitrust legislation which may be harmed by such conduct.²

Broadly speaking, antitrust legislation seeks to promote and protect the process of competition. However, such a goal is inherently vague because competition is itself an ambiguous term. There exist different perspectives on what constitutes competition and consequently what values antitrust law protects or should protect. Historically, the greatest debate has occurred between the “Chicago School”—advocating the maximisation of economic efficiency³ as the sole purpose of antitrust law—and proponents of the “Mainstream School” who reject the Chicagoans’ unitary goal in favour of a multiplicity of goals encompassing both economic and sociopolitical objectives. Chicagoans believe that “[t]he whole task of antitrust can be summed up as the effort to improve allocative efficiency without impairing productive efficiency so greatly as to produce either no gain or a net loss in consumer welfare.”⁴ In contrast, the Mainstream School believes the purpose of antitrust legislation is to promote, *inter alia*,

² The word “theoretical” is employed to highlight that this chapter discusses the effect of successful predatory pricing upon the goals of competition legislation in isolation. The pragmatic effect of prohibiting predation is discussed in part III, chapter A, *infra*.

³ Economists recognise three distinct types of efficiencies: (1) “allocative” efficiency, which refers to the extent to which products are provided to those consumers who are willing to pay the cost to society of providing those products; (2) “productive” efficiency, being the extent to which products are produced using the most cost-effective combination of resources given current technology; and (3) “dynamic” or “innovation” efficiency, which refers to the rate of product and process invention, development and diffusion (see Brodley, J.F., “The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress.” *New York University Law Review*, 62, 1987, 1020-1053, at 1025). When referring to economic efficiency, the Chicago School disregards the importance of dynamic efficiency and focuses solely on allocative and productive efficiency (see, generally, Bork, R.H., *The Antitrust Paradox*. New York: The Free Press, 1993, at 132).

⁴ Bork, *ibid.*, at 91.

wealth redistribution, freedom of trade and choice, the protection of small business, the freedom of democratic polity, and allocative, productive and dynamic efficiency.⁵

The literature encompassing the positive and normative debate on the relevant goals of antitrust law is both voluminous and contentious. Any attempt to review this literature in order to elicit the actual goals of antitrust (or what they should be) would be futile because theories of welfare economics, which are themselves contentious, lie at the root of the debate.⁶ Fortunately, such a review is unnecessary because successful predation can be shown to be harmful to all of the aforementioned goals.⁷ Therefore, regardless of the actual goals which are attempted to be upheld by any particular antitrust legislation, successful predation will inevitably make the attainment of these goals less likely.

It is not difficult to show that successful predation can be detrimental to all of the previously mentioned goals. One need only consider the classical case where the predator obtains a monopoly position and reaps supranormal profits: the resultant deadweight welfare loss implies allocative inefficiency; the lack of competition in the market creates little incentive for product and process innovation⁸ or productive efficiency; the monopolistic pricing adopted by the predator creates a wealth transfer from consumer to producer; victims and potential producers are not free to trade and consumers face a lack of substitute goods; small firms are forced from the market; and

⁵ See generally, Elzinga, K.G., "The Goals of Antitrust: Other than Competition and Efficiency, What Else Counts?" *University of Pennsylvania Law Review*, 125, 1977, 1191-1213.

⁶ See Hovenkamp, H., "Antitrust Policy After Chicago." *Michigan Law Review*, 84, 1985, 213-284, at 235-237.

⁷ This chapter discusses the possible harm to antitrust goals invoked by *successful* predatory pricing. Whilst it can be shown that successful predation can be harmful to all antitrust goals, attempted but unsuccessful predation can also harm certain goals of antitrust law. For example, whenever a below-cost predatory price is implemented, a deadweight welfare loss results and therefore, allocative efficiency is diminished. Similarly, where a predator succeeds in driving out competitors or deterring new entrants and then institutes monopoly pricing in order to recoup their losses, yet the barriers to entry are insufficient to halt the influx of new entrants, the monopolistic price may not exist for a sufficient length of time for the predator to recoup their losses. Such a predatory campaign would be unsuccessful, yet over the period of monopolistic prices welfare is redistributed towards the predator, resources are allocated inefficiently and the predator's political influence may expand (albeit transitorily). Furthermore, the success in eliminating competitors or deterring new entry achieved during the predatory pricing period would restrict competitors' freedom to trade and disadvantage smaller competitors. These examples illustrate the possibility of unsuccessful predation being detrimental to competition. It is adequate for the purposes of this chapter that successful predation can be shown to be detrimental to the goals of antitrust and no further reference will be made within this chapter to the case of unsuccessful predation.

⁸ Although empirical evidence indicates that very highly concentrated industries are not optimally conducive to innovation, neither is a purely competitive market. Rather, the optimal market structure would seem to fall between these extremes (see Scherer, F.M. & Ross, D., *Industrial Market Structure and Economic Performance* (3rd ed.). Boston: Houghton Mifflin, 1990, at 613-660).

the aggregation of wealth and market power by the predator firm could increase its political influence.

The classical case of predation was employed to illustrate that such conduct, if successful, can theoretically harm all goals of antitrust legislation. It should be noted that this harm arises from the conduct of the predator and the resultant market structure. For example, in cutting price to a predatory level, the predator forces small firms from the market, eliminates competitors' freedom to trade, and increases its political influence; the conduct of raising prices to monopolistic levels results in a wealth transfer from consumers to producers and creates the conventional deadweight welfare loss⁹; and finally, the resultant monopolistic market structure and accompanying barriers to entry imply an absence of actual or potential competition, the presence of which would provide an impetus to innovate or improve productive efficiency. As every type of predation involves some form of noncompetitive pricing in order to establish or perpetuate a monopolistic situation, all types of successful predation will exhibit, to a greater or lesser degree, similar conduct and establish an equivalent market structure as the classical case. Therefore, it may be concluded that all types of successful predation can, in theory, be shown to be detrimental to any particular goals of antitrust law.

Although the previous discussion concludes that predation can be detrimental to competition and therefore society, at least one commentator has reached a contrary conclusion by relying on the adage that "the customer is always right". Armentano argues that predatory practices cannot succeed without consumer support; that is, if

⁹ The term "conventional" is employed to denote the misallocation of resources arising from supracompetitive pricing which is usually referred to when a deadweight welfare loss is discussed. Another deadweight welfare loss exists when price falls below the competitive level. In the case of classical predation, this loss represents the inefficient allocation of resources by the predator in satisfying the demand of consumers who were unwilling to pay the actual cost of the product (i.e. they were unwilling to pay the competitive price) (see Posner, R.A., *Antitrust Law: An Economic Perspective*. Chicago: University of Chicago Press, 1976, at 187). Easterbrook argues that this "unconventional" deadweight welfare loss is irrelevant because it is entirely absorbed by the producer and society is not harmed (Easterbrook, F.H., "Predatory Strategies and Counterstrategies." *University of Chicago Law Review*, 48, 1981, 263-337, at 279-280). This argument is not completely valid because the misallocation of resources by the predator in this market results in an inefficient transfer of resources into the predator's market which could be more efficiently employed in other markets (see Zerbe, R.O. & Cooper, D.S., "An Empirical and Theoretical Comparison of Alternative Predation Rules." *Texas Law Review*, 61, 1982, 655-715, at 668). Nevertheless, only local conditions are generally considered in welfare economic studies rather than second order interactions (i.e. between the relevant market and other industries) (see Williamson, O.E., "Predatory Pricing: A Strategic and Welfare Analysis." *Yale Law Journal*, 87, 1977, 284-340, at 306). However, irrespective of whether this misallocation should be considered a relevant deadweight social loss, where antitrust legislation seeks to promote freedom to trade, when a predator institutes predatory prices, the freedom of victims to trade is restricted because even if they follow the predator and drop their prices, the misallocation of resources which occurs is through no fault of their own. In such situations the predator forces the prey to pay the costs of misallocation.

consumers reject a predator's relatively low prices in favour of supporting other producers, then the predatory campaign cannot succeed.¹⁰ If consumers preferences result in the reallocation of resources from high-priced producers to low-priced producers, what right does antitrust law have in preventing such preferences from being satisfied? Furthermore, Armentano rejects the argument that allowing consumers to engage in such behaviour will not be in their long-run interests:¹¹

No one can know (in advance) the long-run interests of buyers. Further, why are so-called long-run interests superior to short-run interests? Buyers can surely decide their *own* time preferences and then decide whether the advantages of short-run price reductions exceed the probable future disadvantages of fewer suppliers.

At least two arguments may be employed to refute Armentano's criticisms. Firstly, Armentano implicitly assumes that current buyers will be future buyers and therefore are in a position to evaluate the long-run effects of their purchasing decision. Such an assumption belies the dynamic nature of demand functions. Current consumers will not always constitute the buyers of the future. In such situations it is necessary to proscribe predation to ensure that future consumers are not disadvantaged by the actions of current customers over which they have no control.

Secondly, Armentano also implicitly assumes that the market exists within a perfect information environment. In order for current consumers to evaluate whether it is in their (short- or long-run) interests to purchase from the predator, they must be aware of the actual purpose underlying the low price. This requires knowledge of, *inter alia*, whether the low price is charged with predatory intent, the likelihood of success, the length of the predation period, the future monopolistic price and the time for which it will exist, whether any substitutes will be developed in the future and when these products will become available. Essentially, current consumers must have complete knowledge about every factor relevant to their future interests—such knowledge will not be held by any consumers in today's society.

¹⁰ Armentano, D.T., "Antitrust Reform: Predatory Practices and the Competitive Process." In Rothbard, M.N. & Block, W. (eds.), *The Review of Austrian Economics*. Washington D.C.: Lexington Books, 1989, 61-74, at 70.

¹¹ *Ibid.* (emphasis in original).

In conclusion, successful predation will be detrimental to competition and society. Such a conclusion does not imply that predation should be proscribed, it merely establishes that predatory pricing as a business conduct can theoretically harm values which society holds dear. Nevertheless, this conclusion is important because it justifies continuing the process of investigation into whether predation should be proscribed. In particular, the focus of attention can now be shifted to more practical issues such as whether such conduct will be employed and the extent to which it will be successful. It is to these issues which the following chapter is devoted.

B

Predatory Pricing as a Rational Strategy

1 Introduction

As shown in chapter A, it is a simple theoretical exercise to illustrate that predation can be detrimental to society. This simplicity is attributable to the implicit assumptions within the examples presented. In particular, it was assumed, *inter alia*, that the predator was a producer who sought to maximise profits, the predatory price cut drove all competitors from the market, that some barrier to entry prevented re-entry or new entry whilst the predator was reaping supracompetitive profits and that the deadweight welfare loss during the period of the monopolistic profits exceeded the gain in social welfare during the price cut. By adopting these assumptions (and other fundamental microeconomic assumptions) the inevitable conclusion is that the classical case of predation is pernicious. However, had a different set of assumptions been adopted, it would not necessarily have been concluded that predation is harmful to all, some, or even any of the goals of antitrust law, and therefore, society.

The aim of economic (and other factual scientific) theories is to explain, predict and guide action.¹² Through knowledge of why an event happens (explanation), information about future events is provided (prediction), which, in turn, allows decisions to be made in order to achieve certain goals (guides action). The utility of a theory is dictated by the extent to which the explanations and predictions provided accord with reality and this is generally determinable by empirically testing the theory's predictions.

¹² Bunge, M., *Scientific Research II: The Search for Truth*. Heidelberg: Springer-Verlag, 1967, at 2.

Attempting to empirically test the consequences of predation involves a number of formidable (if not insurmountable) difficulties. As a first step it is necessary to collect data points (i.e. instances of predation) which can be analysed. Of the few empirical studies which have been conducted, nearly all conclude that predation is a rare behaviour.¹³ Arguably, such a conclusion is tenuous. These studies employed databases consisting of trial records and reported decisions¹⁴ which obviously excludes from observation those cases settled out of court and instances of predation which were never the subject of legal action. Nevertheless, even if the generalisability of these conclusions is limited, these studies do indicate the small probability of finding instances of predation from such a database. Because it is hard to imagine any other accessible data source with as many possible instances of predation as court records, it is unlikely that enough data points could be collected to test the truth of predatory pricing theories.

This likelihood is further reduced when it is recognised that there exist a number of predatory pricing theories. The minimum number of data points required to evaluate a particular theory must be compiled from the relatively small population of identified instances of predation, yet the existence of differing predatory pricing theories implies that a number of these instances are likely to be irrelevant to the predatory pricing theory of interest. Furthermore, because differing theories may present equivalent predictions, evaluating the utility of a predatory pricing theory on the basis of the accuracy of its predictions does not necessarily imply that the theory being tested is

¹³ Excluding studies performed primarily for the purpose of testing the various rules proposed for identifying predatory pricing, since 1950 there have been no more than 20 empirical investigations conducted to ascertain the existence of predation. For a summary of the results of these studies, see Koller, R.H. II, "Predatory Pricing: Where Do We Stand?" In Audretsch, D.B. & Siegfried, J.J. (eds.), *Empirical Studies in Industrial Organisation*. Dordrecht: Kluwer Academic Publishers, 1992, 133-145, [hereafter cited as Koller, "Predatory Pricing."] at 139-142. Only one study (Koller, R.H. II, "The Myth of Predatory Pricing: An Empirical Study." *Antitrust Law and Economics Review*, 4(4), 1971, 105-123 [hereafter cited as Koller, "An Empirical Study."] undertook an evaluation of multiple cases of alleged predation. Testing virtually all of the cases involving allegations of predation since the passing of the *Sherman Act* until the publication of the study, Koller found that in only 26 of the 95 cases did enough evidence exist to conduct an adequate analysis. Predatory pricing was found to have been attempted in seven of the 26 cases and Koller concluded that in five instances the conduct was successful. Importantly, Koller required instances of predation to satisfy three conditions: "(1) the sale of a product at a loss, (2) with what can be reasonably described as a predatory intent, and (3) the achievement of the result intended, i.e., the elimination of the rival or a bending of him to the predator's will." (Ibid., at 106.) Koller's results must be viewed with the knowledge that game-theoretic analyses of the "Deep Pocket" and "Reputation" models of predation show that predatory pricing can be rational behaviour in absence of conditions one and/or three (see section 3, subsections (a) & (b), *infra*).

¹⁴ See Scherer & Ross, *supra* note 8, at 390; Brodley, J.F. & Hay, G.A., "Predatory Pricing: Competing Economic Theories and the Evolution of Legal Standards." *Cornell Law Review*, 66, 1981, 738-803, at 742; Easley, D., Masson, R.T., & Reynolds, R.J., "Preying for Time." *Journal of Industrial Economics*, 33(4), 1985, 445-460, at 455-456.

correct.¹⁵ Finally, more recent models of predation require that the victim be uncertain as to whether they are the subject of predation before such conduct is rational.¹⁶ Such a prerequisite implies that identifying data points to test such theories *must* be difficult and that the population of observed instances of predation is likely to be underinclusive.¹⁷ The accumulated weight of these arguments leads to the conclusion that the explanatory power of predatory pricing theories will not be definitively established by empirical studies.

In the absence of adequate data allowing the predictions of a theory to be evaluated, it is necessary to test the theory's underlying assumptions and logic.¹⁸ If the logic is internally valid and the assumptions reflective of that part of reality which they attempt to simplify, then it may be inferred that the predicted consequences will eventuate. Such an inference, grounded though it may be, does not mean that the predictions are true; however, where the outcomes cannot be directly observed, then inference of these outcomes through scrutiny of a theory's assumptions and logic is the next best alternative for determining its truth (and hence its utility).

The preceding discussion dictates that attention be focused on the assumptions underlying predatory pricing theories. This chapter will first discuss the validity of the criticisms which have been directed at the assumptions of non-game theoretic models of predation. After examining the arguments of non-game theoretic economics (hereafter referred to as "conventional economics"), which conclude that predation is unlikely to occur in practice, the contributions of game theory will be presented in detail. The dynamic analysis of predation provided by game theory highlights crucial assumptions underlying the conclusion of conventional economics that predation is unlikely to occur. When alternative (and possibly more realistic) assumptions are adopted and analysed through game theory the conclusion of conventional economic theory is shown to be tenuous.

¹⁵ Schmalensee, R., "On the Use of Economic Models in Antitrust: The *Realemon* Case." *University of Pennsylvania Law Review*, 127, 1979, 994-1050, at 995.

¹⁶ These models are discussed in section 3, subsection (b) & (c), *infra*.

¹⁷ Organisation for Economic Co-operation and Development, *Predatory Pricing*. Paris: OECD Publications, 1989, [hereafter cited as OECD, *Predatory Pricing*.] at 17.

¹⁸ Schmalensee, *supra* note 15.

2 *The Argument of Irrationality*

In epistemology an action is rational if “(i) it is maximally adequate to a present goal and (ii) both the goal and the means to implement it have been chosen or made by deliberately employing the best available relevant knowledge.”¹⁹ It follows that predation will be rational conduct when it is feasible, profitable and optimal.²⁰ In economics it is assumed that producers’ ultimate goal is long-run profit maximisation. Given this objective, where predation can be employed (feasibility), will promote the goal (profitability) and where no other business strategy will achieve the same effect more profitably (optimality), then an organisation’s decision-makers can be considered to be acting rationally in implementing a predatory pricing strategy.²¹

One of the most contentious aspects of the topic of predatory pricing concerns the rationality of such conduct. Leeman²² sparked this debate in 1956 when he presented a number of criticisms attacking the assumptions and conclusions of the classical model. This was quickly followed in 1958 by McGee’s²³ empirical study which disputed the validity of the allegations of predatory behaviour levelled at the Standard Oil Company. The influence of this study was profound. Until the publication of McGee’s article, Standard Oil had been considered to epitomise both the classical model of predatory pricing and the predatory strategy of employing below cost prices to soften up targets before acquisition.²⁴ McGee’s conclusions provided the catalyst for the ensuing debate concerning the rationality of predation which continues to this day.

¹⁹ Bunge, *supra* note 12, at 121.

²⁰ Ordover, J.A. & Saloner, G., “Predation, Monopolisation, and Antitrust.” In Schmalensee, R. & Willig, R.D. (eds.), *Handbook of Industrial Organisation*. Amsterdam: Elsevier Science Publishers, 1989, 537-596, at 544-545.

²¹ It must be acknowledged that, in spite of the usual assumption that economic agents act rationally, experiments in the field of psychology indicate that humans tend to be risk averse with respect to gains but risk affinitive with respect to losses (see, Gerla, H.S., “The Psychology of Predatory Pricing: Why Predatory Pricing Pays.” *Southwestern Law Journal*, 39, 1985, 755-780). It follows that managers may have a predisposition to: (i) employ predation when faced with falling market shares as a result of new entrants; and (ii) refrain from predatory behaviour when market domination is the goal. It also follows that potential entrants, in viewing an entry opportunity as an opportunity for gain, would have a psychological predisposition for risk aversion when they consider their entry decision. Arguably, in actual predation scenarios, these predispositions would manifest themselves within the managers’ perception of the expected costs and benefits associated with their decision. Therefore, rational decisions regarding predation could be made which already incorporate managers’ psychological traits.

²² Leeman, W.A., “The Limitations of Local Price Cutting as a Barrier to Entry.” *Journal of Political Economy*, 64(4), 1956, 329-334.

²³ McGee, J.S., “Predatory Price Cutting: The Standard Oil (N.J.) Case.” *Journal of Law and Economics*, 1, 1958, 137-169.

²⁴ *Ibid.*, at 137.

The rationality of classical predation has been questioned through the following arguments, presented in no particular order:²⁵

- Potential entrants may be financially powerful and, therefore, be undeterred by the financial strength of the incumbent;²⁶
- It is not the absolute financial reserves of the predator which is relevant, but the size of these reserves relative to the losses which are required to be incurred during the price-cutting period. The greater the market share held by the predator, the larger the losses incurred relative to the prey and the lower the reserves required by the prey to remain in the market;²⁷
- It may be necessary for the predator to supply the entire market to win the price war. In such circumstances, where the pre-predation productive capacity of the predator is insufficient to supply this quantity, the costs of predation include the cost of expanding facilities to meet this demand;²⁸
- During the period of below-cost pricing, the predator incurs absolute and proportionally greater losses than the prey because the predator must expand output at an increasing cost whilst the prey may reduce output and produce at a decreasing cost.²⁹
- Industry specific productive assets remain in the industry until they become obsolete or wear out. In the event of predation, third parties can acquire these assets at distress prices and consequently produce at lower cost than the victim;³⁰
- The post-predation monopoly prices will entice new entry;³¹
- Unless regular demonstrations of predation are performed, threats will not deter entry over time because new potential entrants will be unaware of the willingness of the incumbent to predate;³²
- Where a financially powerful predator's market share is being eroded by smaller, more efficient competitors, in the event of predation to soften up the prey before acquisition, the lower cost prey will be aware of their productive advantage and will demand a high price for their assets;³³
- The option of acquisition will always be less expensive than predation.³⁴ The monopoly prices can be charged immediately and no losses are incurred in gaining the monopoly. The requirement for discounting the cash flows

²⁵ A comprehensive examination of the supporting and opposing arguments regarding the rationality of predation can be found in Koller, "Predatory Pricing." *Supra* note 13. Although the arguments mentioned in this section closely follow those identified by Koller, each argument will be referenced to their original source.

²⁶ Leeman, *supra* note 22, at 329.

²⁷ Bork, *supra* note 3, at 149-152.

²⁸ Birdzell, L.E., "The Conglomerates: A Neighbor's View." *St. Johns Law Review*, 44 (Special Edition), 1970, 292-315, at 306.

²⁹ Bork, *supra* note 3, at 149.

³⁰ Leeman, *supra* note 22, at 330.

³¹ *Ibid.*

³² *Ibid.*, at 331.

³³ *Ibid.*, at 332.

³⁴ McGee, *supra* note 23, at 139-140.

further increases the relative profitability of acquisition compared to predation;

- Customers may acquire victim's assets to defend themselves from future monopoly pricing.³⁵ Alternatively, customers could agree to buy at the old price from the potential victims to ensure future competition. The "free rider" problem may be solved by customers making long-term supply contracts with the potential victim contingent upon sufficient contracts being made to ensure the survival of the potential victim;³⁶
- Victim's assets can only be eliminated if: (i) the industry in question involves fixed costs which are an insignificant proportion of the total costs; or (ii) the assets are obsolete and so are valueless, or (iii) the assets can be easily transferred into other industries. In the first and third cases, ease of exit will equate to ease of entry, and in the second case predation need not be employed because the victim should soon exit anyway due to its relative inefficiency;³⁷
- Where arbitrage is possible, predation is less likely to be successful because customers or third parties can purchase the products during the relatively inexpensive period of predatory prices and use or resell the products in the post-predation period when monopoly prices exist.³⁸

Prima facie, the cumulative effect of the preceding arguments makes the irrationality claims persuasive. The prospective predator must hold (or have access to) financial resources greatly in excess of those available to the potential victim (in order to dispense with the first four arguments), the market must exhibit formidable barriers to entry and re-entry and render arbitrage impossible and some obstacle must dissuade both third parties and customers from acquiring the assets of the potential victim. Furthermore, even if these necessary market and environmental conditions exist, a more profitable alternative strategy (i.e. merger) is apparently available to the prospective predator which would make predation non-optimal, and thus irrational, behaviour.

Seen in light of these necessary elements, one could be forgiven for concluding that predation will rarely be feasible, profitable and/or optimal and, therefore, rational business conduct. However, such a conclusion is not justified. Claiming that predation will not be an optimal strategy because there will always exist a merger agreement

³⁵ Birdzell, *supra* note 28, at 307.

³⁶ Easterbrook, *supra* note 9, at 270-271.

³⁷ Koller, "An Empirical Study." *Supra* note 13, at 107-108.

³⁸ Easterbrook, *supra* note 9, at 269.

which will be more profitable neglects the contemporary merger law of most western jurisdictions which generally prohibits mergers or acquisitions resulting in market dominance or substantial market power.³⁹ McGee counters this criticism by claiming that current merger law will actually act as a deterrent to predation.⁴⁰

[P]resent merger law, if anything, looks unfavorable to successful predation. Anyone who believes in predation might conclude that, with present merger law, a predator would have to grind the [prey's] plant down, rather than simply buying it from a dispirited . . . owner, for a substantial predator might not be able to buy and retire the victim's plant, even if he were somehow able to force it on the block. As far as the predator is concerned, therefore, "physical capacity remains, and will be brought back into play by some opportunist once the monopolizer raises prices to enjoy the fruits of the battle he has spent so much in winning." [Footnote omitted.]

McGee's counterargument is not definitive for two reasons. Firstly, his argument is premised on the assumption that the plant in question is durable *and* industry specific.⁴¹ If the plant is not durable, predation timed to force the exit of the prey when the plant is inefficient will dissuade third parties from acquiring the prey's plant.⁴² Where the plant is not industry specific, third parties could acquire the plant and employ it within other industries or markets. Even if the prey's plant is durable and industry specific, McGee's argument is still not necessarily conclusive. This reasoning relies on two particular game-theoretic models of predation: (i) reputational predation;⁴³ and (ii) predation to precipitate a merger.⁴⁴ As both models are comprehensively discussed below, their implications for McGee's counterargument will only be briefly mentioned. Firstly, McGee's argument is only valid if the "opportunist" believes that it will not suffer the same predatory response as the prey; that is, the incumbent may have successfully established a predatory reputation which will deter entry.⁴⁵ Secondly, in arguing that contemporary merger law acts as a deterrent, McGee neglects to observe the "failing company" defence which exists in the merger laws of many jurisdictions.

³⁹ Posner, R.A., "The Chicago School of Antitrust Analysis." *University of Pennsylvania Law Review*, 127(4), 1979, 925-948, at 939.

⁴⁰ McGee, J.S., "Predatory Pricing Revisited." *Journal of Law and Economics*, 23, 1980, 289-330, at 298.

⁴¹ Ordovery & Saloner, *supra* note 20, footnote 10, at 547.

⁴² Koller argues that if the plant is inefficient then predation is not a concern for the prey will soon exit anyway (Koller, "An Empirical Study." *Supra* note 13, at 107-108). This argument neglects the possibility that the prey will invest in new plant in order to remain in the industry. If, however, the predator indicates its willingness to engage in predation, the prey may reconsider its investment decision in light of the probable predatory response. In fact, the prey may even view the investment decision with more risk aversion than is rational (see Gerla, *supra* note 21, at 769).

⁴³ See section 3, subsection (b), *infra*.

⁴⁴ See section 3, subsection (a), *infra*.

⁴⁵ Ordovery & Saloner, *supra* note 20.

This allows the acquisition of a firm where it is anticipated that, without the merger, the firm will become bankrupt. It has been shown that under certain conditions it is rational to employ predation in order to precipitate a merger or, in the event that the merger is inevitable, to obtain more favourable acquisition terms.⁴⁶

Another criticism levelled at the merger alternative is that incumbents displaying a propensity to merge with or acquire existing competitors at attractive prices will invite new entry until all supracompetitive profits have been dissipated through the supracompetitive acquisition prices.⁴⁷ Such a process may reduce the profitability of merger to the extent that predation is the more profitable alternative.⁴⁸ Furthermore, whereas the necessity for barriers to entry and arbitrage, and the need for the predator to hold substantially greater financial resources than the victim, cast doubt on the probability of a profitable predatory pricing strategy, this probability is increased by certain counterarguments. In particular, empirical evidence indicates that within a not insignificant number of industries, the marginal rate of monopoly profits is positively correlated with market share.⁴⁹ Where this is the case, the greater the market share of the alleged predator, the greater the incentive for predation because the larger the marginal profits from capturing market share.⁵⁰ Also, where the costs of transferring firm-specific assets (e.g. process technologies and specialised technological, marketing, organisational and managerial knowledge) are trivial and symmetric between predator and prey, predation will be more probable by a diversified firm. Diversification provides the predator with the ability to quickly transfer inputs from other production

⁴⁶ See Saloner, G., "Predation, Mergers, and Incomplete Information." *Rand Journal of Economics*, 18(2), 1987, 165-186. For a non-technical presentation of Saloner's model, see section 3, subsection (a), *infra*.

⁴⁷ Conceivably, the incumbent would then cease to offer supracompetitive acquisition prices since it would have no hope in recouping these excess costs (see Brooks, R.C. Jr., "Injury to Competition Under the Robinson-Patman Act." *University of Pennsylvania Law Review*, 109(6), 1961, 777-832, at 788; Yareny, B.S., "Predatory Price Cutting: Notes and Comments." *Journal of Law and Economics*, 15(1), 1972, 129-142, at 131). Ironically, there is evidence which suggests that Standard Oil acquired firms established by the same owners who had previously sold firms to Standard Oil for a substantial profit (see Mariger, R., "Predatory Price Cutting: The Standard Oil of New Jersey Case Revisited." *Explorations in Economic History*, 15(4), 1978, 341-367, at 344; McGee, *supra* note 23, at 153, 157).

⁴⁸ Notice, however, that this process of profit dissipation via supracompetitive acquisition prices requires low barriers to entry so that new acquirers can enter. If structural barriers to entry are low, then predation could not be profitable and therefore neither the merger nor the predation alternatives could result in supracompetitive profits for the incumbent. However, predation could be profitable if a behavioural barrier to entry existed in the form of a reputation for predation (see section 3, subsection (b), *infra*).

⁴⁹ Shepherd, W.G., "Assessing 'Predatory' Actions by Market Shares and Selectivity." *Antitrust Bulletin*, 31(1), 1986, 1-28, at 8.

⁵⁰ *Ibid.*, at 9.

processes or locations for the purpose of a predatory output expansion. When the prey has exited, these resources can then be returned to their prior uses.⁵¹

These counterarguments only mitigate the strength of the irrationality case; they do alter from the fact that conventional economics requires the existence of certain elements before predation can be rational behaviour. Specifically, the predator must have significantly greater accessible financial reserves to enable it to outlast any predatory campaign, and barriers to entry, arbitrage and third party acquisition must exist in order that the predator may recoup its losses *and* obtain supranormal profits. Arguably, such a combination of elements exists so infrequently within markets that instances of attempted predation, even if theoretically rational, are very rare in practice.

3 Game-Theoretic Analyses of Predatory Pricing

In 1944, Von Neumann and Morgenstern published *The Theory of Games and Economic Behaviour*⁵² and simultaneously created a new discipline, now generally referred to as “Game Theory”. Essentially, game theory consists of “the study of rational behaviour in situations involving interdependence.”⁵³ Rational behaviour, as stated in section 2, is any deliberate behaviour which is optimal to achieve some present goal given the current state of knowledge. Interdependence means that the actions of one player affect, and are affected by, the actions of one or more other players. Thus, in any decision-making situation where the outcome is contingent upon the response of other players, game theory may be employed to determine whether a conduct is optimal given the goal which a player seeks. Game theory has been applied to the fields of accounting, economics, finance, law, marketing, political science, psychology, sociology, and warfare.⁵⁴ Furthermore, that the bounds of game theory’s applicability

⁵¹ Levy, D.T., “Predation, Firm-Specific Assets and Diversification.” *Journal of Industrial Economics*, 38(2), 1989, 227-233. However, in the converse situation where the prey is diversified, the probability of successful predation will be lower because the prey will be able to transfer assets into other uses during the predatory period and then re-enter in the post-predation period (*ibid.*, at 231). Note that the effect of diversification on the probability of successful predation is reliant upon the assumptions of symmetric and trivial transfer costs, and the incentives for predation can actually be reversed in the presence of asymmetric costs (*ibid.*). For another model where diversification increases the probability of successful predation, see Hilke, J.C. & Nelson, P.B., “Diversification and Predation.” *Journal of Industrial Economics*, 37(1), 1988, 107-110.

⁵² Von Neumann, J. & Morgenstern, O., *The Theory of Games and Economic Behaviour*. New York: Wiley, 1944.

⁵³ McMillan, J., *Games, Strategies, and Managers*. New York: Oxford University Press, 1992, at 6.

⁵⁴ See Camerer, C.F., “Does Strategy Research Need Game Theory?” *Strategic Management Review*, 12, 1991, 137-152, at 137; Davis, M.D., *Game Theory*. New York: Basic Books, 1970, at viii.

extend beyond human behaviour is implied in the preceding definition by the lack of any requirement that the players be human. As proof of this, game theory has been applied in biology to model animal species' optimal survival strategies.⁵⁵

There is nothing new in studying decision situations for the optimal strategy. For example, consider the ancient human activity of war and the long history of the institutions involved in teaching the effectiveness of different battle strategies. Similarly, the field of commerce constitutes another ancient human activity involving decisions and interdependence which has been formally analysed for the effectiveness of certain business behaviour for centuries. Given that the topic of interest is not new, what is so important about game theory? Simply stated, game theory provides new and superior tools to apply to an old task. Indeed, game theory is not a theory *per se*, but a set of methods which have been developed for a particular task; that task being to analyse decision situations involving interdependence of outcomes for their optimality characteristics. The basis for game theory's superiority is its mathematical foundation. Game theory reduces the important factors which affect the outcome of any interdependent decision-making situation to mathematical constructs. This provides clarity, rigour and formality to the process of analysis, in contrast to the generally descriptive analysis techniques adopted in the past.

Of particular importance to economics and industrial organisation is the ability of game-theoretic models to explicitly incorporate certain elements of reality which are important yet were previously neglected. Non-game-theoretic economic theories (hereafter referred to as "conventional" economic theories) are frequently subject to the criticism that they are static and neglect the dynamic nature of business. Two criticisms are in fact embedded in such statements: firstly, conventional economics employs a relatively short-term time frame, and consequently, distinctions frequently occur between short- and long-term equilibrium outcomes;⁵⁶ and secondly, the

⁵⁵ Camerer, *ibid.*

⁵⁶ This distinction was recognised in relation to predatory pricing by Scherer in 1976 (Scherer, F.M., "Predatory Pricing and the Sherman Act: A Comment." *Harvard Law Review*, 89(5), 1976, 869-890) and Williamson in 1977 (Williamson, *supra* note 9). Although both commentators illustrate long-run "strategic" behaviour, they employ conventional economics to analyse these scenarios. A game-theoretic analysis would probably provide different equilibrium outcomes than those reached under a conventional economic analysis.

interdependent nature of outcomes is neglected in conventional economic models through the use of various assumptions.⁵⁷ The popularity of game theory among economists is undeniably attributable to their dissatisfaction with the constraints which these criticisms impose on economic modelling. In short, the tools employed were inadequate for the task at hand.⁵⁸ Game-theoretic tools incorporate certain fundamental aspects of reality—interdependence of players' outcomes, time, informational asymmetries, and the timing of actions and events—which are neglected by conventional economics.

Game theory is inherently applicable to predatory pricing. Given the environment in which the conduct is employed, the outcomes arising from predation are dependent upon the actions of both the predator and prey. Game theory provides the methods by which such conduct can be assessed for its rationality. At a theoretical level, game theory has had a significant, yet restricted, impact on the predatory pricing debate; in practice, game theory and predatory pricing are mutually exclusive topics of conversation. By employing game theory, predatory pricing has been proven to be a rational strategy under certain conditions. Yet despite this momentous result, the academic debate surrounding the wisdom of prohibiting predation and the optimal method of prohibition has essentially ignored the path-breaking contributions provided by game theory.⁵⁹ Similarly, in the practical arena of the courts where allegations of predation are presented and defended, even less attention has been accorded to the insights into predatory pricing provided by game theory.⁶⁰

This section will present and discuss a number of game-theoretic predation models in order to assess the theoretical significance of such models.⁶¹ In presenting the

⁵⁷ For example, in conventional economic analyses of new entrant scenarios, it is frequently assumed that the incumbent will reduce its price to the extent required to maintain their pre-entry output and the new entrant faces the residual demand (see, e.g., Williamson, *ibid.*, at 297-298).

⁵⁸ This is not to suggest that game theory has not been the subject of considerable criticism. The relevance of these criticisms to game-theoretic predation models will be discussed in section 4, *infra*.

⁵⁹ Despite the encyclopaedic nature of their treatise on antitrust law, Areeda and Hovenkamp never refer to the contribution of game theory to the topic of predatory pricing.

⁶⁰ Klevorick conducted a LEXIS search of cases involving allegations of predatory pricing over the period from 1980 to 1992 and found that of the 192 cases identified, only two mentioned any theory which has been modelled in game-theoretic terms. Neither of these two cases contained any analysis of the relevance of the theory to the predatory pricing allegation at issue (Klevorick, A.K., "The Current State of the Law and Economics of Predatory Pricing," *American Economic Review*, 83(2), 1993, 162-167, at 165-166).

⁶¹ The practical significance of these new theories will be discussed in part III, chapter A, *infra*.

conclusions of this section, the objective of evaluating the theoretical contribution of game theory will have been accomplished.

In order to present the game-theoretic predation models efficiently, certain essential game theory concepts must be defined.

A *player* is any set of decision-making individuals (not necessarily human) having identical interests and goals with respect to the game. Thus a player need not be an individual; a group of individuals with identical interests (e.g. a union, a nation or an animal species) can also be considered to be a player.

A *strategy* is a description of how a player will act at every decision stage of the game. It is an itinerary of a player's actions under any set of environmental conditions.

The *payoff* of a game is the actual utility received once all players have picked their strategies and the game has been played. That is, a player's payoff is the resultant effect on that player of the strategies adopted by all players in the game. The *outcome* of a game is the set of elements resulting from the game, including all the players' payoffs and any other environmental conditions existing at the end of the game.

For the purposes of this thesis, an *equilibrium* denotes a set of strategies which, if followed by the players, will provide each player with the greatest payoff given the strategies of the other players. (Strictly such an equilibrium is termed a Nash equilibrium.) An equilibrium exists where players follow their best strategies, or alternatively, in equilibrium no player can gain by unilaterally altering their strategy. An analysis of games sometimes yields no equilibrium or multiple equilibria. In such cases the model is termed "underspecified". This means that the model is unable to provide an entirely accurate prediction of how rational players should act when faced with such a game.⁶²

Finally, certain terms relating to the information environment must be defined. A game involves *perfect* information if all players know everything which is relevant to

⁶² For a brief discussion regarding the implications of underspecified predation models see section 4, *infra*.

the game. Players are aware of, *inter alia*, the rules of the game, the payoff structure, the number of other players and the nature of any relevant characteristics of these players, the temporal aspects of the game and other players' previous actions. Games may also be played under a condition of *common knowledge*. Information is common knowledge if it is known to all players, and all players know that the others know this, and so on, *ad infinitum*.⁶³

(a) The Deep Pocket or Long Purse Theory

Prior to the application of economic analysis, claims of predatory pricing conjured up emotive scenarios of business giants inducing the exit of financially inferior competitors through below-cost pricing. In such examples, the inequality of resources was emphasised as a prerequisite for successful predation for it enabled the predator to incur a greater loss than the prey. The predator's "deep pocket" or "long purse" provided the means by which the predator could bankrupt its competitors and obtain a monopoly.

Despite the widespread and long-held belief that the Deep Pocket theory of predation was a logical basis for observed organisational behaviour, the first formal analysis of the validity of this theory was not conducted until Telser examined the theory in 1966.⁶⁴ Telser assumes that there exists a limit to the amount of financial resources which firms can obtain. It follows that if an incumbent has greater reserves than a rival, the incumbent is assured of victory if it lowers price below cost because its deeper pocket enables it to sustain losses longer than the rival. Surprisingly, however, this fact does not imply that predation will be employed.

Telser implicitly assumes an environment of perfect information. In conjunction with the assumption of financial resource constraints, this assumption inevitably leads to his conclusion that, in the absence of any legal impediment to merger, incumbent firms will always adopt the merger alternative and any instance of predation will necessarily

⁶³ See Rasmusen, E., *Games and Information: An Introduction to Game Theory*. Cambridge: Basil Blackwell, 1989, at 50.

⁶⁴ Telser, L.G., "Cutthroat Competition and the Long Purse." *Journal of Law and Economics*, 9, 1966, 259-277.

be a mistake of judgment by the predator.⁶⁵ This conclusion is derived from the existence of mutual threats. Because of its deeper pocket, the incumbent can credibly threaten to engage in predation because both firms know that it will win. Conversely, the rival can credibly threaten to engage in a price war because, even though it will ultimately lose, while it remains in the market it will inflict losses upon the predator. The existence of these mutual threats makes it in the interests of both competitors for the incumbent to acquire the rival. Telser shows that the merger price will be a function of the strength of each firm's threats which are, in turn, a function of their relative financial resources.

Telser's conclusion may be seen as validating McGee's informal argument that predation will not be rational behaviour because the merger alternative will always be more profitable.⁶⁶ However, Telser's analysis is only semi-formal. The real implications of his model and conclusions were not entirely realised until game-theoretic tools were employed by Benoit⁶⁷ in 1984 to formally model the Deep Pocket theory. Benoit's model provides a perfect example of the benefits provided by game theory. Specifically, modelling an interdependent decision situation formally and systematically amplifies the essential elements which influence the equilibrium outcome. In the case of the Deep Pocket theory, Benoit's model highlights the crucial importance of the perfect information assumption, which in Telser's model had only been implicit.

Like Telser, Benoit assumes a duopoly where both firms are financially constrained. One firm (the predator) is assumed to hold greater financial resources than the other (the victim). This enables the predator to outlast the victim in any predatory price battle. A perfect information environment is explicitly assumed. In each period, the predator can either choose to fight (i.e. employ predatory pricing) or cooperate with the victim. The victim chooses between remaining in the industry or exiting forever.⁶⁸

⁶⁵ *Ibid.*, at 267.

⁶⁶ See text accompanying note 34, *supra*.

⁶⁷ Benoit, J.P., "Financially Constrained Entry in a Game with Incomplete Information." *Rand Journal of Economics* 15(4), 1984, 490-499.

⁶⁸ In an earlier study, Benoit examined the alternative scenario where the entrant was given the chance to re-enter the industry (but only a finite number of times). It was found that the equilibrium outcome was no different from the scenario which disallowed re-entry (*ibid.*, footnote 2, at 491).

Relying on a backwards induction proof, Benoit showed that predation will never occur. Consider the n th period of a predatory pricing battle where the victim's resources have been reduced to zero. It would be bankrupt and must leave the industry. Now in period $n-1$, because the predator knows that the victim can only survive one more period of predation, it will choose to fight. Given the imminent bankruptcy of the victim if it chooses to fight, it is optimal for the victim in period $n-1$ to exit and save its remaining resources. Now consider period $n-2$. The predator is aware that if it fights in this period and reduce the victim's resources, the victim will choose to exit in period $n-1$. The predator will therefore choose to fight in period $n-2$. But the victim is also aware of its ultimate demise, and therefore will choose to exit in period $n-2$ in order to save even more resources. Continuing this process of backwards induction, the victim's equilibrium strategy is to exit at the first hint of predation. Indeed, the victim will never enter because, in the face of entry, the predator will immediately threaten predation thereby causing the simultaneous exit of the entrant.⁶⁹

Three assumptions are of critical importance to the conclusions of Telser and Benoit that predation will not occur: (i) financial constraints; (ii) a perfect information environment; and (iii) rational players. Financial constraints stop firms from obtaining unlimited additional resources. In the absence of such constraints, neither firm would win a predatory battle and therefore, no such battle would ever occur. As to the remaining two assumptions, unless the players know of the extent to which each could survive a predatory price war (perfect information), could mentally calculate the equilibrium outcome (hyper-rationality) and know that the other could perform this computation (perfect information), neither firm would have the ability to compute its best strategy and the equilibrium outcome would not intentionally result. Because the assumption concerning players' degree of rationality is generally applicable to all game theory models, a discussion of its implications will be left until section 4. It is, however, appropriate to consider the importance of the perfect information and financial constraints assumptions on the Deep Pockets theory alone.

⁶⁹ Alternatively, if the entrant had greater financial resources than the incumbent at period zero, then the incumbent would immediately exit as it would ultimately lose any predatory battle.

After relaxing the assumption of perfect information, Benoit found that entry may actually occur in equilibrium.⁷⁰ Assume a situation of imperfect information where only the victim knows how long they can survive a predatory battle. Additionally, assume that the victim can somehow commit themselves to the industry in the sense that its exit can only be obtained through bankruptcy. The predator is aware of this possibility (but uncertain as to the actual nature of the victim's commitment) and assigns some positive probability that the victim is committed. A committed victim will, by definition, choose to remain in the industry regardless of whether the predator preys or cooperates. Therefore, the longer a victim chooses to remain in the industry, the greater the probability that this victim will be committed. An uncommitted victim has the choice of remaining or exiting. Unlike the situation of perfect information, there may exist some incentive for the uncommitted victim to remain in the industry despite the deeper pocket of the predator. If the victim mimics the behaviour of a committed entrant and remains in the industry during periods of predation, the predator may eventually infer that the victim is committed and decide that it would be more profitable to cooperate. In such a case, the victim has created a profitable reputation for being committed even though it is uncommitted.

The period for which an uncommitted victim would continue to attempt to create a reputation is a function of its financial reserves. Thus, the predator still has an incentive to predate until the probability that the victim is committed passes some threshold such that the predator decides to cooperate. Therefore, there exist two opposing incentives: one for predation and the other for reputation-building. In some period—a function of the predator's probability that the victim will be committed, the rate at which this probability increases with the number of periods the victim remains and the financial resources of the victim—either the predator will choose to cooperate or the victim will exit. In any case, predation can be an equilibrium strategy under conditions of unequal financial resources and imperfect information.

⁷⁰ Benoit, *supra* note 67.

An interesting result arises when one considers the information asymmetry employed by Benoit; that is, the predator's uncertainty regarding the victim's level of commitment. Whilst the factors that affect the predator's estimate of the victim's level of commitment are not explicitly examined by Benoit, he states:⁷¹

[I]ntuition suggests that high exit costs may be positively related to this estimate. Since . . . a large estimate facilitates entry and, more importantly, is necessary for a potential entrant to have a (strictly) positive (expected) value, our theory suggests that high exit costs may be beneficial to a potential entrant.

In theory, the height of barriers to exit can be positively correlated with the extent of barriers to entry.⁷² For example, this may be the case where there exist substantial sunk costs which, by definition, the potential entrant could not recoup if they had to exit the market. Thus, in Benoit's model, barriers to exit increase the predator's estimation that the prey will be committed and therefore decrease the probability that predation will be employed; yet the one factor which must exist for rational predation, barriers to entry, will also be high! Ironically, the existence of barriers to entry may not indicate that predation, *ceteris paribus*, is any more probable.⁷³

Neither Telser nor Benoit provide a convincing explanation to justify the assumption that firms face constraints. This deficiency is remedied by Fudenberg and Tirole⁷⁴ using theories of financing under conditions of asymmetric information. They assume that a firm faces an investment opportunity with a random profit and that it has insufficient equity to finance the investment itself. Although banks are willing to lend funds, they are uncertain as to the expected profitability of the investment opportunity and must incur an audit cost to determine the investment's profitability. Fudenberg and Tirole cite research by Gale and Hellwig⁷⁵ to show that in such circumstances, the optimal debt contract involves the debtor reimbursing the bank some predetermined

⁷¹ *Ibid.*, at 492-493.

⁷² See, e.g., Geroski, P., Gilbert, R.J. & Jacquemin, A., *Barriers to Entry and Strategic Competition*. Fundamentals of Pure and Applied Economics No.41, London: Harwood Academic Publishers, 1990, at 60-61; Tirole, J., *The Theory of Industrial Organisation*. Cambridge: MIT Press, 1988, at 328; Gilbert, R.J., "Mobility Barriers and the Value of Incumbency." In Schmalensee, R. & Willig, R.D. (eds.), *Handbook of Industrial Organisation*. Amsterdam: Elsevier Science Publishers, 1989, 475-535, at 520. However, in theory exit and entry barriers do not have to be symmetric (see Levy, *supra* note 51, footnote 17, at 232; Gilbert, *ibid.*, at 521).

⁷³ Whilst predation may not be more probable under a Deep Pocket theory, it is not clear what effect the dual existence of high entry and exit barriers have on this probability where predation is also employed for reputational purposes.

⁷⁴ Fudenberg, D. & Tirole, J., "A 'Signal-Jamming' Theory of Predation." *Rand Journal of Economics*, 17(3), 1986, 366-376.

⁷⁵ Gale, D. & Hellwig, M., "Incentive Compatible Debt Contracts: The One Period Problem." *Review of Economic Studies*, 52, 1985, 647-664.

amount in absence of default. If the debtor defaults, the bank will perform an audit and receive the net return from the investment. This finding establishes the possibility of financial constraints on firms. The lower the equity of the firm, the greater the amount it must borrow to finance the investment. However, the probability of default and audit is an increasing function of the amount borrowed. This is because the debtor must repay a greater amount to the bank from the randomly determined profit and therefore is more likely to default. Thus, at some point, the amount of equity held by the firm is too low (and the probability of audit too high) such that the bank will find it unprofitable to invest, or it would charge such high interest rates that, in conjunction with the probability of bankruptcy, the firm would choose not to invest. Simply stated, the lower the firm's equity, the greater the probability that it will be unable to obtain funds for further investment. This relationship creates an incentive to predate because "the very handicap that makes the target firm vulnerable to attack [i.e. relatively small financial resources] may also foreclose it from access to the capital markets."⁷⁶

The Fudenberg–Tirole theory has been criticised for not allowing for the possibility that firms could obtain multi–period finance contracts.⁷⁷ It is claimed that such contracts essentially provide the prey with a finite deep-pocket and, assuming that the existence of this contract was known by the predator, it may eliminate the incentive to predate by making the predation a negative net present value strategy. This argument was investigated by Bolton and Scharfstein.⁷⁸ They consider a duopoly operating in two periods whereby each firm must incur a fixed cost at the beginning of each period to stay in the market. One firm (the predator) has a deep–pocket (i.e. it can fund the fixed cost through internally generated funds) whilst the other (the prey) must borrow to fund the cost. The returns to the prey can be either "high" or "low" and, because it is assumed that the actual returns are unobservable to the lenders, there exists an incentive for managers to misappropriate some of the returns. Bolton and Scharfstein show that the optimal financing contract involves the lenders' decision to fund the second period

⁷⁶ Ordoover & Saloner, *supra* note 20, at 550.

⁷⁷ See Milgrom, P. & Roberts, J., "New Theories of Predatory Pricing." In Bananno, G. & Brandolini, D. (eds.), *Industrial Structure in the New Industrial Economics*. Oxford: Oxford University Press, 1990, 112-137, at 120; Ordoover & Saloner, *supra* note 20, at 550.

⁷⁸ Bolton, P. & Scharfstein, D.S., "A Theory of Predation Based on Agency Problems in Financial Contracting." *American Economic Review*, 80(1), 1990, 93-106.

being positively correlated with the magnitude of the profits announced in the first period. That is, in order to mitigate managers' incentive to misappropriate profits, lenders threaten to cut off funding for the second period unless the first period profits are adequately high. As occurs in the Fudenberg–Tirole model, the nature of this financing contract increases the predator's incentive to predate, because the lower the prey's profit in the first period, the greater the probability that the prey will exit.⁷⁹ However, the significance of the Bolton–Scharfstein model is in proving that predation can be rational in the presence of multi-period financing.⁸⁰

In contrast to the Fudenberg–Tirole and Bolton–Scharfstein models where an incentive to predate was created in order to eliminate preys' credit facilities, Poitevin provides an asymmetric information model where preys' financial structure creates an incentive to predate. As with previous models, it is assumed that a fixed cost must be incurred by firms at the start of the period to remain in the market. Two types of potential entrant exist: "low-cost" and "high-cost". It is also assumed that an information asymmetry exists in the capital market such that, whilst the market can accurately value the incumbent, only entrants know their true value (which is negatively correlated with their cost type). In order to ensure that they are correctly valued, low-cost entrants signal their type by adopting debt finance. Their willingness to use debt illustrates their positive expected value despite the fixed financing cost, and thereby signals their low-cost type and true value. However, the use of debt renders the entrant susceptible to predation-induced bankruptcy. The incumbent, recognising that debt

⁷⁹ It has been emphasised that the incentive to predate is only effective because the lenders cannot observe when predation is actually occurring. If lenders could observe predation, then they may be more willing to refinance in the second period where the "low" profits arose because of predation rather than misappropriation (see Milgrom & Roberts, *supra* note 77, at 122). Although this criticism is valid, it has been already noted that recognising the existence of predation is extremely difficult (even for those courts which have access to all information). Hence, it is very unlikely that lenders, with their limited access to information, would be able to detect the existence of predation.

⁸⁰ Whether predation will be a rational strategy in a multiperiod context will, of course, be dependent upon the values of the parameters and whether the predator can observe the finance contract. Bolton and Scharfstein show that when the predator can observe the terms of the financing contract, the optimal contract deters predation by reducing the probability that the firm is refinanced if the prey's profits in period one are high (Bolton & Scharfstein, *supra* note 78, at 102). Thus, this eliminates the predator's incentive to reduce the prey's period one profits. When the predator cannot observe the financing contract (and the value of the "low" profit is less than the fixed cost), their equilibrium strategy is to predate if the prey enters (*ibid.*, at 104). Knowing this, the investor will not provide the funds, and entry will not occur. Interestingly, it is therefore in the prey's interest to publicise the nature of the financing contract. In the case where the "low" profit is greater than the fixed cost, no pure equilibrium strategy exists (*ibid.*).

involves an additional fixed cost, engages in predation in order to reduce the entrant's cash flows and increase the probability of bankruptcy.⁸¹

Poitevin's model does not constitute a pure Deep Pocket predation theory. It is not the incumbent's greater financial resources which ensure its victory in a predatory battle; rather, the entrants' nemesis is their obscurity which imposes greater costs upon them. Furthermore, Poitevin's model is restricted to situations involving new entrants or inconspicuous incumbent firms (e.g. private companies or partnerships) and does not attempt to explain how two equally well-known firms could engage in a predatory battle. Nevertheless, its importance stems from formally proving that predation will constitute rational behaviour by an incumbent in the presence of another stimulus, viz, debt financing.

Despite proving the rationality of predation in imperfect information environments, the preceding models of the Deep Pocket theory only partially undermine Telser's conclusion that predation will only occur as an error of judgement. Telser's conclusion relies on the existence of merger as an alternative strategy and because this alternative was not included within any of the aforementioned game-theoretic models of the Deep Pocket theory, these models do not definitively refute Telser's conclusion. However, such proof is provided by Saloner⁸² who evaluates the rationality of predation under market conditions where merger is a possibility. Saloner considers an asymmetric information scenario involving a competitive duopoly. One firm (the prey) is uncertain about the cost structure of the other firm (the predator). The prey assigns some probability that the predator's costs are one of two possible types, "high" or "low". Saloner assumes that there exists a positive correlation between the profitability of the predator and the probability assigned by the prey that the predator is a low-cost firm.⁸³

⁸¹ It should be noted that Poitevin's model does not involve the problem of multiperiod financing. Rather than constrained financial resources creating the incentive for predation, it is the actual existence of debt which induces predatory activity. Presumably, the longer the financing contract under Poitevin's model, the greater the incentive for predation because the longer the entrant is required to incur the additional fixed cost of interest.

⁸² Saloner, *supra* note 46. Saloner's model employs aspects of both signalling and reputational predation. These models are reviewed in subsections (b) & (c), *infra*.

⁸³ This assumption is reasonable since the quantity which the prey would supply to the market will be a negative function of the quantity which they expect the predator to supply, which will, under competitive conditions, be a positive function of the predator's cost efficiency.

It follows that in the event of a merger, the higher the probability that the predator is a low-cost firm, the more favourable the acquisition terms should be to the predator.

Saloner analyses a three period game. In the first period, both firms simultaneously supply a quantity to the market. At the end of the second period, the prey updates their belief regarding the predator's cost type on the basis of the quantity supplied by the predator in the first period. Then the predator makes a "take it or leave it" merger offer to the prey which is either accepted or rejected. Saloner analyses two alternative period three scenarios. In the first scenario, there is no possibility of entry, and therefore a merger is the most profitable outcome for both firms since the final market structure is a monopoly. As the merger price is a negative function of the probability that the predator is a low-cost firm, this creates an incentive for high-cost predators to mimic the actions of a low-cost predator in order to acquire the prey at a lower cost. Predation provides the means to achieve this result. By increasing output in the first period beyond that which would be competitively supplied (i.e. pricing predatorily), the high-cost predator signals that its cost structure is low to the prey. Predation may therefore be an equilibrium strategy in the presence of a merger alternative, and this conclusion provides support for the contention that even where merger is the ultimate outcome, predation may be employed to affect the terms of the merger.⁸⁴

In the second period three scenario examined by Saloner, barriers to entry are assumed insubstantial. Under such conditions, *a priori*, a merger is not the most profitable outcome. New entry will be attracted by the monopoly prices following the merger and, additionally, where the merger was consummated at a supracompetitive price, potential entrants will be attracted by the prospect of being acquired at similarly profitable prices.⁸⁵ If, however, it is assumed that potential entrants will not enter where they believe that they would face a low-cost predator, predation is again an equilibrium strategy. Under such conditions, predation signals to the prey that the predator is low-cost (even if this is not true) thereby affecting the terms of the merger, but more

⁸⁴ See, e.g., Brooks, *supra* note 47, at 788; Telser, *supra* note 64, at 267-268; Yamey, *supra* note 47, at 130-131.

⁸⁵ See text accompanying notes 47-48, *supra*.

importantly it signals to potential entrants the predator's low-cost type and deters entry. As such, informational rather than structural barriers to entry are the determinative environmental factor which dictates the rationality of predation.

Saloner's contribution is important for two reasons: (i) it disproves the contention that predation will be irrational in the presence of a merger alternative;⁸⁶ and (ii) it again illustrates that informational rather than structural barriers to entry may have a strong influence on entry. With respect to the first point, it has already been noted that the principal counterargument to the contention that predation is irrational because a merger will always be more profitable relies upon the contemporary antitrust laws of many western jurisdictions which generally restrict mergers resulting in dominant market positions. However, as Saloner notes, such laws often allow for a "failing firm defence" whereby the merger may be authorised if it is probable that the potential acquiree will go bankrupt.⁸⁷ Saloner's conclusion that it can be rational for predation to be employed in order to improve the terms of the merger to the predator undermines the rationale for a failing firm defence. In addition to influencing the terms of the potential merger, predation could induce the financial distress of the potential acquiree and thereby increase the likelihood that the merger will be authorised.

In conclusion, the application of game theory to the Deep Pocket theory of predation has enabled the essential market and environmental conditions impacting on the rationality of this theory of predation to be highlighted. In particular, an informational asymmetry of some form is required before predation can be found to be an equilibrium strategy. This informational imperfection—whether it be lenders' or investors' uncertainty regarding profitability or financial stability—justifies the assumption of limited financial resources and enables the Deep Pocket theory to operate

⁸⁶ Burns provides empirical evidence in support of Saloner's theory (Burns, M.R., "Predatory Pricing and the Acquisition Cost of Competitors." *Journal of Political Economy*, 94(2), 1986, 266-296). Burns compared the acquisition cost of 43 competitors purchased by the American Tobacco Company between 1891 and 1906 with a regression estimate of the value of these firms if American Tobacco had not engaged in predatory pricing. Burns concluded that (*ibid.*, at 269):

[The results] indicate that alleged predation reduced the acquisition costs of American Tobacco both by lowering the amounts paid for asserted victims and by creating a reputation for misconduct that lessened expenditures for competitors acquired peacefully thereafter. Other things being equal, the estimated direct savings range up to 60 percent of what some targeted rivals would have cost if they had not been preyed on, and the trust's reputation produced an additional discount averaging 25 percent.

⁸⁷ Saloner, *supra* note 46, at 166.

with the result that the firm with the longest purse will win the predatory battle. A second advancement provided by game theory is in disproving the contention that predation will be irrational because a merger will always be more profitable. As Saloner shows, even in absence of antitrust laws which prohibit mergers, it is rational to use predation to precipitate a merger or, in the case where a merger is inevitable, to obtain more favourable acquisition terms. Finally, game-theoretic Deep Pocket models highlight the fact that predatory prices need not be sub-marginal to induce exit; all that is required is a negative cash flow.⁸⁸ This implies that the cost-based tests currently employed to identify predation in a number of jurisdictions will be ineffective against all welfare reducing acts of predation. Further, in complete contrast to the focus of these tests, these models show that when attempting to identify (Deep Pocket) predatory behaviour, attention should be directed towards the cash flows of the alleged prey, *not* the cost structure of the predator.

(b) Reputation Theories

Whereas Deep Pocket predation models involve exit inducing behaviour, the principal purpose (and social harm) of reputation theories of predatory pricing (hereafter referred to as “reputational predation”) is entry deterrence. As the label suggests, the deterrence effect is achieved by an incumbent firm establishing a reputation for predatory behaviour.⁸⁹

The fear of losses which would be imposed by a predatory rival would serve as an obstacle to the entry of new firms. . . Furthermore, there would be no need for the firm actually to suffer the losses of predation except on those occasions in which it was necessary to demonstrate the willingness to do so. The more certain the use of the predatory policy appeared to prospective entrants, the fewer the cases in which it would have to be carried out, and the lower the cost to the predator.

As was the case with the Deep Pockets theory, the concept of a predatory reputation was employed to legitimise the rationality of predation long before any formal analysis was devoted to the subject. The first attempt at formally modelling a theory of reputational predatory pricing was conducted by Selten⁹⁰ in 1978.

⁸⁸ Milgrom & Roberts, *supra* note 77, at 123.

⁸⁹ Brooks, *supra* note 47, at 789.

⁹⁰ Selten, R., “The Chain Store paradox.” *Theory and Decision*, 9, 1978, 127-159.

Coincidentally, as with the inaugural formal analysis of the Deep Pocket case conducted by Telser, Selten concluded that reputational predation was not an equilibrium strategy.

Selten assumes that an incumbent firm, a “chain store”, operates in N geographically separate markets and faces N potential entrants, one in each market. In each period, one entrant decides whether to enter the market or not. If entry occurs, the chain store then decides whether to price aggressively or cooperatively. The chain store does not face a decision if no entry occurs. Entrants are aware of the entry decisions of previous entrants and the responses of the chain store. The payoffs to the chain store and the entrant under each scenario (shown in table 1) are assumed to be common knowledge.

		Potential Entrant	
		Enter	No Entry
Incumbent	Cooperate	2 2	5 1
	Aggressive	0 0	5 1

(Incumbent’s and entrant’s payoffs shown at top left and bottom right of each quadrant, respectively)

Table 1: Payoffs for Selten’s Chain Store Paradox

Consider the case when $N=1$. If the potential entrant enters, their payoff depends on the response of the incumbent. In the face of entry, the incumbent’s best strategy is to cooperate and collect a payoff of two. The entrant knows that the incumbent will cooperate if it enters and because the entrant’s payoff from entering (given cooperation will occur) exceeds their payoff from not entering, it will enter. Therefore, the equilibrium strategies for the entrant and incumbent are entry and cooperation, respectively. Now consider when $N=2$. In this case, if the incumbent could establish a reputation for aggressiveness and deter entry in the second period, their two period payoff would be five; in contrast, cooperation in both periods would yield only four. Thus, it would seem that the incumbent has an incentive to prey in the first period. However, a complete game-theoretic analysis yields the fallacy within this perception,

and it is this conflict between the intuitive belief in the value of a reputation and the logic of game-theoretic equilibrium analyses which resulted in the label the “chain store paradox”.

The proof that a reputation under Selten’s assumptions is valueless relies on a process of backward induction. In the last period, N , the game looks exactly the same as if $N=1$. There is no possibility for increasing long-run returns by establishing a reputation for aggressiveness, and therefore, the incumbent’s equilibrium strategy involves cooperation. The entrant, knowing this fact, will enter. Now consider period $N-1$. The entrant in this period is aware that the incumbent’s decision in the next period cannot be influenced by their decision in the current period. Thus, the game in $N-1$ assumes the structure of an $N=1$ game and entry occurs with the incumbent cooperating. This process of backward induction establishes entry and cooperation as equilibrium strategies for the entire game of N periods. “The induction is inexorable and the conclusion clear: in equilibrium, predation will never be practiced.”⁹¹

The chain store paradox has proved a source of interest for numerous game-theoreticians who have attempted to solve this conflict between the intuitive and game-theoretic conclusions.⁹² Unsurprisingly, scrutiny was directed at Selten’s assumptions and, as with Telser’s Deep Pocket analysis, these assumptions have been shown to be crucial to the conclusion that predation will not occur in equilibrium. In general, whether predation will be an equilibrium strategy will depend on:

- (i) whether the number of markets is finite or infinite; and
- (ii) the type and degree of information held by the players.

Selten’s chain store paradox arises from the finite market/perfect information case. Two other combinations will be examined: (a) the infinite markets/perfect information case; and (b) the finite markets/imperfect information case.

⁹¹ Milgrom, P. & Roberts, J., “Predation, Reputation, and Entry Deterrence.” *Journal of Economic Theory*, 27, 1982, 280-312, at 283.

⁹² See, e.g., Rosenthal, R.W., “Games of Perfect Information, Predatory Pricing and the Chain Store Paradox.” *Journal of Economic Theory*, 25, 1981, 92-100; Milgrom & Roberts, *ibid*; Kreps, D.M. & Wilson, R., “Reputation and Imperfect Information.” *Journal of Economic Theory*, 27, 1982, 253-279; Easley, *et al.*, *supra* note 14; Pitchik, C., “Commitment, Reputation, and Entry Deterrence.” *Games and Economic Behaviour*, 5, 1993, 268-287.

The Infinite Markets and Perfect Information Case

When there exists an infinite number of markets, accommodation is not the incumbent's unique equilibrium strategy, and therefore, the chain store paradox does not necessarily arise.⁹³ This result is easily illustrated by considering the backward induction proof used by Selten to identify the chain store paradox. When $N=\infty$ there always exists another potential entrant whose entry may be deterred by the predatory reputation of the incumbent. Thus, accommodation is not the unique equilibrium strategy and the incumbent has an incentive to predate to maintain its reputation.

Notice that with perfect information, entry would not occur in equilibrium if the one period cost of predation is less than the discounted monopoly profits to infinity and if these discounted net profits exceed the discounted profits to infinity obtained from accommodation. If the entry occurred in the first period, the assumption regarding the profitability of predation would ensure that the incumbent would predate. Having observed the predatory behaviour, the remaining potential entrants would expect to be the target of similar actions and would not enter. Similarly, the first potential entrant, knowing that it is optimal for the incumbent to predate in the first period, will not enter. Entry does not occur and the incumbent is imputed with a reputation for toughness which they did nothing to create.

For a number of reasons, the assumption that there may exist an infinite number of markets is not as implausible as it may first appear. Firstly, if a market is viewed in an abstract sense as an entry opportunity then there exist as many "markets" as there are investors who are attracted by supranormal profits.⁹⁴ Secondly, an infinity of markets could also exist if there were markets for different generations of a firm's products.⁹⁵ Finally, at a more practical level, Fisher claims that in most contexts, corporations generally assume an infinite time horizon when making strategic decisions.⁹⁶ Therefore,

⁹³ Milgrom & Roberts provide a formal proof that predation is an equilibrium strategy under conditions of infinite markets (Milgrom & Roberts, *supra* note 91, at 305-306).

⁹⁴ See Vickers, J., "The Economics of Predatory Pricing." *Fiscal Studies*, 6(3), 1985, 24-36, at 29; Ordoover & Saloner, *supra* note 20, at 552.

⁹⁵ Milgrom & Roberts, *supra* note 77, footnote 23, at 131.

⁹⁶ Fisher, F.M., "Games Economists Play: A Noncooperative View." *Rand Journal of Economics*, 20(1), 1989, 113-124, at 123.

even if, *ex post*, a market was finite, incumbents would predate because of their *ex ante* belief to the contrary. Fisher contends this observation provides a simple and pragmatic solution to the chain store paradox and therefore eliminates the need to investigate the case of finite markets.

In contrast to Fisher's contention, a number of commentators claim that the infinite markets solution is unsatisfactory for both theoretical and pragmatic reasons. Ordover and Saloner argue that in many practical situations, organisations are faced by entry into distinct geographic markets and the number of entrants will be finite.⁹⁷ However, the validity of this argument is questionable. As already noted, if markets are considered entry opportunities then the geographic restrictions of any particular market are irrelevant. A more convincing practical obstruction to the infinite markets solution involves the extreme degree of rationality required by the players in order that the creation of a predatory reputation is an equilibrium outcome.⁹⁸ Unless both the incumbent and the potential entrants actually perform the mental computations and dogmatically adopt their optimal strategies, the chain store paradox will not be solved by infinite markets. Another problem of the infinite markets solution involves the theoretical concern of multiple perfect equilibria.⁹⁹ This problem is common to infinite horizon games and can be seen in the context of the chain store paradox by recognising that accommodated entry in all markets is also an equilibrium strategy for the incumbent. This means that predation is not a unique equilibrium strategy, and therefore, the infinite markets solution cannot be used as a predictor of optimal firm behaviour.

The Finite Markets and Imperfect Information Case

In order to remedy the theoretical problem of multiple perfect equilibria, game theorists turned their attention to Selten's implicit assumption of perfect information. In particular, papers by Kreps and Wilson¹⁰⁰ and Milgrom and Roberts¹⁰¹ were the first to

⁹⁷ Ordover & Saloner, *supra* note 20, at 553.

⁹⁸ The problem of hyper-rationality is endemic to game-theoretic models and will be discussed in section 4, *infra*.

⁹⁹ Ordover & Saloner, *supra* note 20, at 553.

¹⁰⁰ Kreps & Wilson, *supra* note 92.

¹⁰¹ Milgrom & Roberts, *supra* note 91.

show that the introduction of minute informational asymmetries is sufficient to allow for reputational predation to be a rational strategy.

To illustrate the essence of their models, consider a two period market where an incumbent faces two different potential entrants, one in each period. At the beginning of each period, the incumbent has to choose between predating or accommodating entry. Assume that there exists some probability that it is profitable for the incumbent to predate in the first period (in the sense that predation is more profitable than accommodation); or alternatively, that the predator will act irrationally and predate in the first period regardless of the profitability of the conduct. Such an incumbent is termed “tough”. In contrast, a “normal” incumbent finds predation unprofitable in any single period because the payoff from accommodation exceeds that from predation. Assume that the losses incurred by the normal incumbent (or the irrational tough incumbent) in the first period from predatory behaviour will be recouped if no entry occurs in the second period. Moreover, a period of predation followed by a period of monopoly profits is assumed to exceed the returns from accommodation in both periods. In order to decide whether to enter or not, the second potential entrant must infer the incumbent’s nature and this inference can only be made from the incumbent’s behaviour in the first period. This creates an incentive for normal incumbents to mimic the behaviour of a tough incumbent in an attempt to establish a reputation for being tough. If such a reputation is successfully created, entry will not occur in period two and the normal incumbent will derive greater profits than by accommodating entry in both periods. However, as soon as entry is accommodated the normal incumbent reveals its true type and the game reverts to the chain store paradox. Its reputation is destroyed and cannot be replaced.

Whether it is an equilibrium strategy for a normal incumbent to predate in order to establish a reputation is generally dependant upon the payoff structure of the market,¹⁰² the number of markets remaining (whether temporal, geographical or product-related) and the probability that the incumbent is tough. Importantly, where

¹⁰² Involving factors such as the returns from a monopoly relative to returns from accommodating entry, the discount rate, and the immediate cost of predation.

many markets remain, *ceteris paribus*, it will be rational for a normal incumbent to predate for a reputation even if entrants' uncertainty about the incumbent's type is extremely small. For example, in Kreps and Wilson's model, if entrants assess the probability that the incumbent will be tough to be one chance in one thousand, then for any finite game with more than ten stages to go, the entrant will not enter because (in the entrant's perception) the incumbent will always fight.¹⁰³ Although a minute probability is all that is required to resolve the chain store paradox, it should be recognised that at some minimum number of remaining stages, it will not be rational for the incumbent to predate and all remaining entry will be accommodated.

The imperfect information solutions to the chain store paradox are resilient to the relaxation of a number of the assumptions involved in the simple model presented above. Recent contributions have shown that reputational predation can be rational under a variety of entry conditions including re-entry by potential entrants¹⁰⁴ and scenarios where entrants can enter at any time.¹⁰⁵ Further extensions are provided by Easley, *et al.*,¹⁰⁶ who incorporate the possibility of simultaneous (as opposed to sequential) entry¹⁰⁷ and provide for the incumbent's type to be drawn from an infinity of types. Their model is of particular importance, not only for these extensions, but because it shows that even if the incumbent knows that entry will eventually occur, it can be rational for the incumbent to predate in some markets for the purposes of *delaying* entry (as opposed to *detering* entry) in other markets.¹⁰⁸ To illustrate this effect, in the situation where entry can occur simultaneously and at any time, it was found that some entrants delay their entry in the hope of learning the incumbent's nature from its response to the entry of earlier entrants.

For practical purposes, the most important assumptions in reputational predation models concern information. In these models, predation only occurs as an equilibrium

¹⁰³ Kreps & Wilson, *supra* note 92, at 262.

¹⁰⁴ *Ibid.*

¹⁰⁵ Lipman, B.L., "Delaying or Detering Entry: A Game-Theoretic Analysis." *Journal of Economic Dynamics and Control*, 14, 1990, 685-708.

¹⁰⁶ Easley, *et al.*, *supra* note 14.

¹⁰⁷ The possibility of simultaneous entry is also introduced by Fudenberg, D. & Kreps, D.M., "Reputation in the Simultaneous Play of Multiple Opponents." *Review of Economic Studies*, 54, 1987, 541-568.

¹⁰⁸ Easley, *et al.*, also found that it can be rational to predate in perpetuity in some markets to deter or delay entry into other markets (*supra* note 14, at 454).

strategy because players are not operating in a perfect information environment. In the model outlined above, the informational imperfection which allowed predation to be an optimal strategy involved asymmetric information; the potential entrants were uncertain about the profitability of predation. It is the existence of this uncertainty within the model which enables the chain store paradox to be resolved. However, although this uncertainty may serve a useful purpose in solving the paradox, it has been criticised as being unrepresentative of reality. Easterbrook argues that the incumbent will equally be unaware of potential entrants' cost structures.¹⁰⁹ Hence, because neither incumbent nor potential entrant is certain of the others' costs, neither can identify their optimal strategy by evaluating the logic of the reputation model.

Given the crucial role played by information asymmetries in reputational predation models, Easterbrook's argument would indeed be damaging to these models if it proved to be true. However, a number of counterarguments exist which mitigate the impact of Easterbrook's claims. Firstly, and intuitively, assuming equivalent product and process technologies, it is likely that an incumbent firm would be relatively better informed about the costs any potential entrant will face than would the entrant.¹¹⁰ Secondly, and more importantly,¹¹¹ a number of other informational imperfections exist under which predation may be an optimal strategy. For example, entry can be effectively deterred when potential entrants are uncertain about the rationality of the incumbent. That is, potential entrants may believe that the incumbent is "crazy" and has a predisposition for predatory behaviour regardless of any inevitable loss.¹¹¹ In a different scenario which directly confronts the situation envisaged by Easterbrook, Kreps and Wilson show that predation may be an equilibrium outcome under the more realistic assumption of dual uncertainty whereby the incumbent and potential entrant are uncertain about the profitability of entry and predation respectively.¹¹² A final example involves the situation where all potential entrants know that the incumbent is not tough, yet are not aware whether the others know this. Under

¹⁰⁹ Easterbrook, *supra* note 9, at 286.

¹¹⁰ OECD, *Predatory Pricing*. *Supra* note 17, at 12.

¹¹¹ Milgrom & Roberts, *supra* note 91, at 303.

¹¹² Kreps & Wilson, *supra* note 92, at 266-275.

such a condition, entry may still be deterred because the entrant believes that the incumbent will predate in order to retain its reputation among the other potential entrants.¹¹³

The examples of informational imperfections and market conditions mentioned above illustrate the diversity of environments which are conducive to rational reputational predation. The resilience of the assumptions of reputation theories under conditions of finite markets and imperfect information implies that such theories may prove robust in reality. Such proof is inherently an empirical question, yet, as already noted, empirically investigating the existence of predatory pricing is fraught with difficulties.¹¹⁴ One partial solution to the lack of empirical evidence exists in the form of laboratory experiments. By observing predatory behaviour in such experiments, it can be inferred that such activity may actually occur in reality. Moreover, testing theories by simulating natural markets in a laboratory offers a number of advantages over direct observation of the natural markets. As Davis and Holt state:¹¹⁵

The chief advantages offered by laboratory methods in any science are replicability and control. *Replicability* refers to the capacity of other researchers to reproduce the experiment, and thereby verify the findings independently. . .

Control is the capacity to manipulate laboratory conditions so that observed behaviour can be used to evaluate alternative theories and policies.

These advantages are accentuated when game-theoretic economic theories are the subject of testing. As should already be evident, in game-theoretic models “. . . predictions are often based on very subtle behavioural assumptions for which there is little practical possibility of obtaining evidence from naturally occurring markets.”¹¹⁶ It is important to note that laboratory experiments will not provide conclusive proof that predation is attempted (or occurs) in reality. The use of laboratory experiments raises its own methodological issues,¹¹⁷ and the contrived environments, whilst providing the advantages of replicability and control, abstract from reality and as a result the conclusions often lose some generality. Nevertheless, given the substantial difficulties

¹¹³ See Milgrom & Roberts, *supra* note 91.

¹¹⁴ See text accompanying notes 12–17, *supra*.

¹¹⁵ Davis, D.D. & Holt, C.A., *Experimental Economics*. Princeton: Princeton University Press, 1993, at 14–15.

¹¹⁶ *Ibid.*, at 3.

¹¹⁷ See *ibid.*, at 17–18.

involved in conducting a direct empirical determination of the existence of predation and the inherent subtleties of game-theoretic predation models, such theories appear suited to laboratory experimentation. As such, conclusions reached in these experiments will provide supportive evidence of the plausibility of predation and will, therefore, be of value.

In an article entitled “In Search of Predatory Pricing”¹¹⁸, Isaac and Smith present the results of a laboratory experiment conducted to test for the existence of classical predation. Examining the case of an incumbent and a single competitor, an environment is employed which they consider to be most conducive to predatory behaviour.¹¹⁹ The “favourable” structural conditions generally focused on factors emphasised in conventional economic theories of predation. However, experiments were also conducted for both the perfect information and imperfect information cases. In every combination of conditions tested, the search was unsuccessful.

Isaac and Smith sought to determine the existence of predation in a single market context. In contrast, Harrison replicated their imperfect information experiment within a multi-market environment.¹²⁰ It is hardly surprising that Isaac and Smith did not encounter reputational predatory behaviour because the existence of multiple markets is fundamental to reputation models of predation. As Harrison notes, multiple markets provide “an active ‘escape’ opportunity for any prey and a potential reward to a reputation for predation.”¹²¹ Harrison’s results evidenced a number of instances of attempted predatory pricing although only some ultimately proved profitable. These results provide only limited support for reputation theories of predation because the experiment was not designed to explicitly test these theories and consequently does not incorporate crucial elements of such models. For example, the players’ information was too imperfect in the sense that the players were not informed about the payoff functions

¹¹⁸ Isaac, R.M. & Smith, V.L., “In Search of Predatory Pricing.” *Journal of Political Economy*, 93(2), 1985, 320-345.

¹¹⁹ The environment employed involved “(1) two firms—one large; one small; (2) scale economies, with the larger firm having a cost advantage over the smaller (but with the smaller firm’s production required for market efficiency); (3) a “deep pocket” possessed by the advantaged firm; and (4) sunk entry costs tending to discourage re-entry when such costs must be incurred.” (Isaac & Smith, *ibid.*, at 320.) After experiments failed to produce predatory behaviour under these conditions, an additional condition, complete information about competitors’ costs, was introduced. Again predatory behaviour failed to materialise.

¹²⁰ Harrison, G.W., “Predatory Pricing in a Multiple Market Experiment: A Note.” *Journal of Economic Behaviour and Organisation*, 9, 1988, 405-417.

¹²¹ *Ibid.*, at 406.

involved with entry or non-entry. Furthermore, the structure of the experiments involved a number of competing potential entrants; no incumbent monopolist existed whose choice it would be to “fight” or “accommodate”.

One recent contribution has sought to empirically test the validity of a game-theoretic reputational predation model.¹²² Specifically, Jung, *et al.*, tested the Kreps and Wilson model and found strong evidence to support the Kreps–Wilson hypothesis that “normal” incumbents will predate in an attempt to establish a reputation for toughness. In accordance with the predictions of Kreps and Wilson, with the probability that the incumbent was “tough” being 33%, over an eight period game almost 100% of normal incumbents predated in the first four periods when faced with entry. During these periods, almost all potential entrants chose not to enter the market and consequently, few instances of actual predatory action were required in the early stages of the game.¹²³

The results of Harrison and Jung, *et al.*, must be viewed in context. They are single laboratory experiments which, by definition, were conducted within a controlled environment abstracted from the totality of conditions existing in reality. Nevertheless, the results provide compelling empirical evidence that under certain conditions, players attempt to create predatory reputations and these intangible barriers to entry can be profitable. Further experiments are required to evaluate the existence of reputational predation under a variety of environmental conditions before these conclusions may be generalised. Such a finding would have significant ramifications for judicial tests for predation, particularly given the nature of contemporary judicial approaches to determining the existence of predatory pricing.¹²⁴

¹²² Jung, Y.J., Kagel, J.H. & Levin, D., “On the Existence of Predatory Pricing: An Experimental Study of Reputation and Entry Deterrence in the Chain Store Game.” *Rand Journal of Economics*, 25(1), 1994, 72-93.

¹²³ *Ibid.*, at 73. Although not relevant to the existence of reputational predation, the results of Jung, *et al.* were in conflict with certain other predictions of the Kreps–Wilson model. In particular, the rate of entry increased during latter periods whereas Kreps and Wilson predicted a stationary entry rate (*ibid.*, at 81, 84). Also there was no evidence to support the prediction that entry would occur more often following periods of no entry than periods involving predation and no entry (*ibid.*, at 84).

¹²⁴ These issues are discussed in part II, chapter C and part III, chapter B.

(c) Signalling Theories

The final group of game-theoretic predation models which will be considered falls generally under the label “signalling theories”. As with the Deep Pocket theories, these models involve the use of predation for the purposes of inducing exit. The two types of signalling theories which exist—“pure signalling” and “signal-jamming” models—differ only with respect to the information imperfections involved. In pure signalling models the predator has an information asymmetry regarding some market characteristic (e.g. demand, marginal costs or fixed costs) which impacts upon the profitability of the prey and is therefore relevant to the prey’s exit decision; in signal-jamming models, the predator and the prey are equally uncertain about some relevant market factor. In both types of model the predator attempts to influence the prey’s beliefs regarding the actual nature of the market characteristic so that the prey will decide that remaining in the market will be unprofitable.¹²⁵

A peculiar characteristic of signalling theories is that predation, whilst occurring as an equilibrium behaviour, only induces welfare-enhancing exit. As will be shown, in equilibrium, the use of predation is only effective in inducing exit when the market demand is insufficient to sustain the profitable survival of the prey. Paradoxically, predation is beneficial to society. Note, however, that this outcome relies upon the characteristics of the models. If the temporal boundaries are extended to include entry decisions as well as exit decisions, signalling predation can deter desirable entry and, thereby, be detrimental to society.

The first pure signalling model of predation was presented in 1986 by Roberts.¹²⁶ In this model he considers a duopoly operating for two periods under conditions of asymmetric information. The predator is aware of the actual level of

¹²⁵ Bagwell presents an interesting signalling model under which below cost pricing by an *entrant* is an equilibrium strategy (Bagwell, K., “Informational Product Differentiation as a Barrier to Entry.” *International Journal of Industrial Organisation*, 8(2), 1990, 207-223). In his model, which has close structural similarities to Roberts’ signalling model (see, text accompanying note 126, *infra*), Bagwell examines the scenario where a duopoly, an incumbent and a new entrant, sell an “experience good”. Experience goods are those whose quality is not revealed until it is consumed. An informational imperfection exists such that consumers are aware that the quality of the incumbent’s product is low, yet they are uncertain about the quality of a new entrant’s product, which can either be “high” or “low”. Bagwell shows that in a two period game, it can be rational for a high quality entrant to price below marginal cost in order to signal its quality. Essentially, the entrant engages in a form of promotional (below cost) pricing in order to establish themselves in the market.

¹²⁶ Roberts, J., “A Signalling Model of Predatory Pricing.” *Oxford Economic Papers (Supplement)*, 38, 1986, 75-93.

demand, which may be either “strong” or “weak”, but the prey does not know the level of demand. The prey must incur a fixed cost in the second period to remain in the market and its exit decision is based on the level of demand. Only if demand is strong will it be profitable for the prey to remain. If the prey believes demand is weak, it will exit. The prey therefore has an incentive to discover the level of demand. In the first period, both firms supply a quantity to the market. Each observes the resultant market price but neither observes the other’s quantity. The entrant then infers the level of demand from the first period market price and decides whether to exit or remain in the market. If it remains, competition resumes in the second period; if it exits, the predator has a monopoly in period two.

The informational asymmetries now come into play. The predator is aware of the prey’s lack of knowledge and the importance of market demand to the market structure in period two. When demand is strong in period one, the incumbent has an incentive to supply a greater than profit-maximising volume to the market in order to suppress the market price and persuade the prey that market demand is low. If this belief is created, the prey will exit. Alternatively, if demand is weak, it will be beneficial to both the predator and the prey if this is accurately signalled to the prey so that it may exit. However, signalling this fact is more difficult than it may appear. The prey will not believe a simple announcement regarding the actual demand since the predator would willingly make such an announcement if demand was strong in order to induce the prey’s exit. For the same reason, the predator cannot supply the profit-maximising quantity for a weak demand and expect the prey to believe that demand is weak from the resultant market price. In order to signal credibly the actual level of demand, the predator must supply a volume to the market which will depress the price so far that, if demand was actually strong, it would be unprofitable for the predator to price at this level in order to induce the exit of the prey.

Although it appears that predation will occur in conditions of both strong and weak demand, the analysis is incomplete. The predator’s incentive to depress the price when demand is strong is common knowledge. It is for this reason that the only way which the predator can credibly signal when demand is weak is by depressing the price to unprofitable levels. However, this knowledge also ensures that predation will not

occur if demand is actually strong. If the predator depresses price to a level which would be profitable over the two periods if the prey exited, the prey will immediately know that the predator is attempting to bluff and will correctly infer that demand is strong.¹²⁷ This leads to the conclusion that predation cannot be profitable in such signalling games. As Roberts states, “. . . predation aimed at inducing exit occurs and is costly for the incumbent, but no extra exit is induced.”¹²⁸ Given that predation cannot be profitable, why would the predator nevertheless predate (and incur losses) in order to signal that demand is weak? The answer is that by inducing the exit of the prey, the predator loses less money than they would have had the prey remained in the second period. “Thus predation occurs (and is followed by exit) only when demand is weak, which is exactly the situation in which exit would occur under full information or the known absence of predation.”¹²⁹

The characteristics of Roberts’ model dictate that predation will be beneficial to society by ensuring that resources are not misallocated to markets through excess supply. If, however, a small extension is introduced, predation once again exhibits its customary pernicious nature. Consider period zero when the prey is making an entry decision. Whether the prey will enter is dependent upon the expected profits, which is a function of the fixed cost it must incur, the probability it assigns to demand being strong or weak, the profits which it would obtain if demand was strong over both periods and the losses which it would incur if demand was weak in the first period. Focusing on the last factor, consider the outcome if it is common knowledge that predation cannot be employed or if a perfect information environment exists so that both players know the actual level of demand. If demand is weak in the first period, the prey will produce their loss-minimising quantity and exit at the end of the first period. The predator does not have to signal the weak demand by depressing price through predation. Yet this implies that in the asymmetric information environment when predation is allowed, the resultant

¹²⁷ It should be noted that despite not increasing output to predatory levels when demand is strong, the predator has an incentive to increase output beyond that which it would supply if the prey knew that demand was strong. This incentive originates from the asymmetric information held by the predator and the condition that both firms supply their quantity to the market simultaneously. The possibility that demand is weak induces the prey to reduce its supply in the first period. As the predator knows this fact, in the case where demand is strong, it will increase its supply to fill the shortfall caused by the prey’s uncertainty.

¹²⁸ Roberts, *supra* note 126, at 77.

¹²⁹ *Ibid.*

market price will be lower than in the perfect information environment because predation has to be employed for signalling purposes. Therefore, the losses which the prey will incur if demand is weak are less in the perfect information scenario than in the imperfect information scenario. There will exist a number of potential entrants with different fixed costs or who hold different probability assessments of the nature of demand. Since predation will result in greater losses when demand is weak, beyond combination of fixed cost and expected demand, entry will be deterred. Thus, predation for signalling purposes, whilst ineffectual in influencing exit or quantity decisions, will harm society by deterring entry.

As mentioned, signal-jamming predation models differ from pure signalling models with respect to the type of information imperfection. Whereas in pure signalling models the predator has private knowledge, in signal-jamming models both players are equally uncertain about the value of some market factor. The label “signal-jamming” was first employed by Fudenberg and Tirole.¹³⁰ They examined the scenario of a two period duopoly where one firm (the prey) contemplates exit at the end of the first period. The prey must pay an unknown fixed cost each period and this cost is the relevant factor upon which it bases its exit decision. The prey only observes its current profits (net of fixed costs) and must infer the level of its fixed costs from its period one profits. This creates an incentive for secret predation in the first period.¹³¹ By pricing predatorily, the predator will reduce the prey’s profits. This will cause the prey to infer that its fixed costs are higher than is actually the case, and possibly induce its exit.

As in the pure signalling predation models, signal-jamming predation is ineffective in inducing the exit of the prey in equilibrium, and the prey only exits when it would do so if a perfect information environment existed. The same reasoning also applies. The prey, being aware of the predator’s incentives to predate, anticipates that such behaviour will occur. This knowledge is incorporated within its inference

¹³⁰ Fudenberg & Tirole, *supra* note 74.

¹³¹ If the prey could observe the predator’s price, its beliefs regarding its fixed costs could not be influenced by the predator’s pricing actions because the prey could simply deduct its net profit per unit from the market price and thereby determine the true level of its fixed costs. This necessitates the assumption that the prey cannot observe the predator’s price. Although this assumption may appear unreasonable, Fudenberg and Tirole argue that such would be the case where firms sold to a small number of customers and offered discounts which were not public information (*ibid.*, at 369).

regarding fixed costs and consequently, exit only occurs when it is actually unprofitable for the prey to remain. Nevertheless, although predation is futile, the predator does depress price. This is in order to ensure that the prey does not infer that its fixed costs are *lower* than the true level and thereby be *more* aggressive (by supplying a greater quantity) in the second period. As in Roberts' model, this affects potential entrants' entry decisions and may deter new entry.

Although predation occurs as equilibrium behaviour in the Roberts and Fudenberg–Tirole signalling models, the net welfare effect is ambiguous.¹³² On the positive side, market price is depressed in all scenarios and therefore (up to some point) society benefits. Once price falls below marginal cost, however, resources are misallocated and the price reductions are detrimental to society. A further negative impact arises from the deterrence of beneficial entry. The expectation of predation may reduce the expected profitability of some potential entrants to the extent that alternative investment opportunities are pursued. The possibility of both positive and negative effects on social welfare means that the actual welfare effect of predation which is adopted for signalling reasons is *ex ante* indeterminate.

4 Conclusion

Having reviewed the arguments of conventional and game–theoretic economics regarding the rationality of predation, there is a temptation to unconditionally proclaim predation as rational organisational behaviour. This temptation must be resisted. If the game–theoretic models reviewed above demonstrate anything, it is that the rationality of predation is entirely dependant upon the environment in which it is employed. Whether predation is rational behaviour is context specific, and it is therefore invalid to categorically state that predation is rational or irrational behaviour.

That the rationality of predation is context specific is hardly surprising. Indeed, game theory was not required to arrive at this conclusion for it is implied in the diversity of conventional economic arguments and counterarguments surrounding the rationality

¹³² *Ibid.*, at 373.

debate. Nevertheless, the application of game theory to the topic of predatory pricing has advanced the rationality debate in two important ways.

First, where the rationality of an interdependent decision scenario is required to be assessed, a number of general advantages are provided by employing a game-theoretic analysis compared to a conventional economic analysis. Game theory provides a formal system for analysing the optimality characteristics of such situations. This system allows for the explicit incorporation of relevant environmental and player characteristics which conventional economics simply cannot accommodate. It follows that a framework which incorporates these additional factors and enables the influence of these factors to be identified will provide a more rigorous analysis of any particular theory in question. Most importantly, the analytical framework provided by game theory enables the validity of a theory's logic to be proven. In contrast to game-theoretic models, conventional economic theories do not incorporate as many relevant characteristics because the tools employed are inadequate to analyse such factors.

Moreover, game-theoretic models employ mathematical constructs whilst conventional economic theories of predation are virtually always descriptive and diagrammatic. When attempting to validate the logic of a theory, diagrams and words may be complements but are never substitutes for the clarity and objectivity provided by mathematical notation. This distinction is particularly important with respect to predation theories when one considers the inherent difficulties in empirically testing such theories. As discussed previously, the truth of predation theories must be determined by testing the extent to which the assumptions reflect reality and the validity of the logic. Therefore, the value of game-theoretic analyses over conventional economic analyses (because of the capacity of the former to prove the validity of a theory's logic) is substantially increased when the theory in question concerns predatory pricing.

The second significant benefit to the rationality debate provided by game-theoretic predation analyses is an outcome of the first benefit. The rigorous analysis of predation theories allowed by game theory highlights the fundamentally important assumptions of many rationality and irrationality arguments. For example, as has been

shown in reviewing all three types of game-theoretic predation models, the information environment has an enormous influence on the rationality of predation.¹³³ Even minute diversions from a perfect information environment can alter the validity of the conclusions of certain irrationality arguments. The more important of these arguments which are susceptible to such a criticism include McGee's claims regarding the existence of a merger alternative, Telser's analysis of the Deep Pocket theory of predation, Selten's Chain Store Paradox and those arguments which ignore or dispute the possibility of predation for reputation purposes.

The discussion of game theory in this thesis has, to date, focused on the benefits which such methods provide to the topic of predatory pricing. It would be remiss to only adopt a positive perspective because there exist a number of valid criticisms which are directed at game-theoretic analyses. As a number of these criticisms are particularly pertinent to game-theoretic predation analyses, it is appropriate to briefly survey their substance and implications.

The first criticism relates to the degree of rationality imputed to players in games. If equilibrium strategies are to be accurate predictions of actual behaviour, players must act rationally. However, even in simple games the mental processes required for rational thinking can be staggering. Furthermore, many predation models are examples of complex games where the required mental computations, inferences and forecasts involve an even greater level of sophistication. Some commentators argue that to expect that players actually have the capacity to think in this manner strains the bounds of credulity.¹³⁴ Undoubtedly there is a large degree of truth embedded in this

¹³³ Although the game-theoretic predation models reviewed all require some type of informational imperfection for predation to constitute rational behaviour, a number of models have been developed where predation exists as an equilibrium strategy within a perfect information environment. For example, where goods are desirable because they are compatible with an installed base of durable goods (e.g. computer programs which are compatible with Microsoft Windows) then there may exist only a small "window of opportunity" when the introduction of a new, incompatible technology could supplant the installed base and draw away enough users for entry to be profitable. In such a scenario, it can be an equilibrium strategy for an incumbent to engage in predation whilst the window of opportunity is open in order to dissuade the migration of installed users to the new technology (see, Farrell, J. & Saloner, G., "Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation." *American Economic Review*, 76(5), 1986, 940-955; Katz, M.L. & Shapiro, C., "Technology Adoption in the Presence of Network Externalities." *Journal of Political Economy*, 94(4), 1986, 822-841).

¹³⁴ See, e.g., Milgrom, P. & Roberts, J., "Informational Asymmetries, Strategic Behaviour, and Industrial Organisation." *American Economic Review*, 77(2), 1987, 184-193, at 188.

opinion;¹³⁵ however, in defence of the rationality assumption, other forces exist which may lead to an equilibrium outcome.¹³⁶ Another more general defence lies in the fact that economic analyses, whether they be conventional or game-theoretic, have always assumed that decision-makers are rational. This assumption is critical to any economic theory for it operationalises the more fundamental assumption that all economic entities are utility maximisers. The rationality assumption will not always prove true; however, its use is justified because (i) it conforms (on average) with the reality of decision-making,¹³⁷ and (ii) it is the best yet developed.¹³⁸

The second criticism of game theory involves the frequent discovery of multiple equilibria. As mentioned in the introduction to this section, where a model is found to have multiple equilibria it is termed “underspecified” and this implies that actual behaviour cannot be perfectly predicted. Unfortunately, underspecified models are not rare. Multiple equilibria frequently occur in infinite horizon models and those involving asymmetric information and, as shown, both characteristics are employed in a number of game-theoretic predation models. The predation models in question do not escape unscathed and usually a number of behavioural assumptions are made in order to restrict the available strategies able to be chosen by players so that a unique or small number of equilibria are derived. Although the nature of these restricting assumptions is often reasonable—and devising new and more realistic assumptions is currently a major research arena for game-theoricians—the existence of multiple equilibria significantly decreases the normative value of such models.¹³⁹

A related problem with game-theoretic models involves the inherent difficulties in empirically testing such models. As has been stated, game theory provides a significant advantage over conventional economic analysis by allowing the logic of

¹³⁵ Jung, *et al.*, provide empirical evidence which indicates that the rationality assumption may not be reasonable within a reputational predation decision situation (*supra* note 122, at 90).

¹³⁶ Such forces include: (i) *communication* whereby players announce their intended strategies; (ii) *adaptation* where players learn over time which strategies are optimal; and (iii) *evolution* whereby equilibrium strategies are selected during the natural development of species (see Camerer, *supra* note 54, at 141-144).

¹³⁷ See generally, Easterbrook, F., “Workable Antitrust Policy.” *Michigan Law Review*, 84, 1986, 1696-1713, at 1709. For an argument supporting the assumption of rational behaviour in the use of predation models see McGee, *supra* note 40, at 294-295.

¹³⁸ Milgrom & Roberts, *supra* note 134, at 188.

¹³⁹ *Ibid.*, at 190.

theories to be proven. Furthermore, this is especially valuable when the economic theories being examined do not lend themselves to empirical examination. However, the ability of game theory to analyse more sophisticated environments complicates empirical testing of the game-theoretic models themselves. For example, game theory has enabled the critical role played by information to be theoretically established, yet attempting to determine whether particular information environments actually exist in reality and have the predicted influence over particular decision situations is incredibly difficult to say the least. The solution may involve a greater use of laboratory experiments and case studies rather than the more traditional cross-sectional regression investigations adopted for testing many conventional economic theories.¹⁴⁰

The final criticism presented here is that game theory, at least as it has been applied to industrial organisation, has not resulted in a general unifying theory of organisation behaviour. Such a theory states “. . . what *must* happen or . . . tells us how what happens depends on well-defined, measurable variables.”¹⁴¹ Fisher argues that the discovery of such “generalising” theories is the goal which should be pursued by game-theorists. However, he criticises the current results of game-theoretic oligopoly research which, instead of establishing generalising theories, in his view simply comprise a collection of theories which illustrate what *can* happen. Fisher terms such theories “exemplifying theories”. Although expressing these anecdotes in game-theoretic terms is valuable for highlighting the crucial features of these anecdotes, Fisher states that such game-theoretic analyses will be of limited usefulness unless they point to some generalising principle. The same criticism would undoubtedly be levelled at game-theoretic predation research.

The distinction between generalising theories and exemplifying theories is only a matter of degree. Generalising theories state what will happen given background circumstances but so do exemplifying theories. The difference is that the latter case is restricted to a smaller domain of probable instances where the requisite conditions will occur. For example, assume that Milgrom and Roberts’ reputational predation model is

¹⁴⁰ *Ibid.*, at 191; Camerer, *supra* note 54, at 146.

¹⁴¹ Fisher, *supra* note 96, at 118.

an accurate description of what would happen if an incumbent firm ever found itself in the environment modelled. In this case, Milgrom and Roberts' model would tell us what will happen. However, Fisher would not classify this theory as a generalising theory although he might consider that there would exist a generalising theory of predation.

Why there must be a generalising theory of oligopoly or predation is a question which Fisher fails to answer. As mentioned at the beginning of this conclusion, if nothing else, the application of game theory to the topic of predation has highlighted the rich diversity of environments in which predation will constitute rational organisational behaviour. This finding implies that it is unlikely that an all-encompassing theory of predation will be discovered. Rather, a number of generalising predation theories may develop to encompass all reputation, signalling and Deep Pocket exemplifying theories of predation. Alternatively, it may be that even these classifications are too broad and more refined classes will evolve. In any case, whatever the breadth of the ultimate generalising theories, they will be discovered through the use of theoretically well-founded analytical tools. If (or when) these tools are developed, then any alleged predatory behaviour will be able to be analysed in light of its social effect and punitive action taken if the behaviour will be detrimental.

In spite of the criticisms which are directed at game theory, the benefits provided by the application of these analytical tools to the topic of predatory pricing are significant. In proving that predation can be rational organisational behaviour, game-theoretic predation models eliminate the opportunity for dismissing predation allegations purely on the grounds of irrationality. These models show that the merits of each allegation deserves to be accorded an investigation. Moreover, it must be recognised that in addition to highlighting the critical influence of particular environmental factors, these models have unearthed factors the influence of which was previously unrealised.

C

Tests for the Existence of Predatory Pricing

1 Introduction

Although successful predatory pricing will be socially detrimental and can be rational business behaviour, unless such conduct is identifiable it should not be considered a cause of concern. If identification is impossible, no credible deterrent—such as declaring a particular behaviour illegal—can be imposed to ensure that people do not engage, or are dissuaded from engaging, in the offending behaviour. The extent to which predation can be accurately identified, both in theory and in practice, is therefore important.¹⁴²

This section involves a positive evaluation of all important conventional economic tests which have been proposed for identifying predation.¹⁴³ Potentially, such an examination could be voluminous. No other topic within the subject of predatory pricing has amassed as much literature as the debate surrounding the theoretical and practical efficacy of various tests. The stage has been reached where the technical aspects of these tests are well understood and, as the waning of the number of new

¹⁴² In this thesis, when the word “accurately” is used in the context of a test for predation, it refers to that test’s ability to correctly identify socially detrimental predatory pricing behaviour.

¹⁴³ The debate regarding the optimal test for the identification of predatory pricing was sparked by Areeda, P. & Turner, D.F., “Predatory Pricing and Related Practices under Section 2 of the Sherman Act.” *Harvard Law Review*, 88, 1975, 697-733 [hereafter cited as Areeda & Turner, “Predatory Pricing.”]. Other prominent articles include: Scherer, *supra* note 56 [hereafter cited as Scherer, “Predatory Pricing.”]; Areeda, P. & Turner, D.F., “Scherer on Predatory Pricing: A Reply.” *Harvard Law Review*, 89, 1976, 891-900 [hereafter cited as Areeda & Turner, “Scherer Reply.”]; Scherer, F.M., “Some Last Words on Predatory Pricing.” *Harvard Law Review*, 89, 1976, 901-903; Posner, *supra* note 9; Williamson, *supra* note 9; Areeda, P. & Turner, D.F., “Williamson on Predatory Pricing.” *Yale Law Journal*, 87(7), 1978, 1337-1352; Williamson, O.E., “Williamson on Predatory Pricing II.” *Yale Law Journal*, 88(5), 1979, 1183-1200; Areeda, P. & Turner, D.F., “Predatory Pricing: A Rejoinder.” *Yale Law Journal*, 88(7), 1979, 1641-1642; Baumol, W.J., “Quasi-Permanence of Price Reductions: A Policy for Prevention of Predatory Pricing.” *Yale Law Journal*, 89(1), 1979, 1-26; Greer, D.F., “A Critique of Areeda and Turner’s Standard for Predatory Practices.” *Antitrust Bulletin*, 24(2), 1979, 233-261; Joskow, P.J. & Klevorick, A.K., “A Framework for Analyzing Predatory Pricing Policy.” *Yale Law Journal*, 89(2), 1979, 213-270; Ordover, J.A. & Willig, R.D., “An Economic Definition of Predation: Pricing and Product Innovation.” *Yale Law Journal*, 91(1), 1981, 8-53.

articles on the subject may indicate, there would seem to remain few profitable avenues for research involving these tests—the marginal returns hardly seem to justify the marginal cost.

It would be pointless to attempt to provide another survey and discussion of the value of proposed tests of predation since a number of excellent articles already fulfil this role.¹⁴⁴ One issue which has not been the subject of extensive investigation, and which is pertinent to the contemporary theme of this thesis, involves the efficacy of the proposed tests in accurately identifying predatory behaviour which has been modelled in game-theoretic terms (such predatory behaviour will hereafter be termed “game-theoretic predation”). The inadequacies of some cost-based tests in this arena have already been alluded to in the previous section and these assertions will be justified in this section through an examination of the efficacy of cost-based tests in identifying game-theoretic predation. Furthermore, because conventional economic non-cost-based tests have not been specifically developed for the purpose of identifying game-theoretic models of predation, it is possible that none could accurately identify these “new” strands of predatory behaviour. This possibility will be examined by extending the investigation to include non-cost-based tests.

It is convenient to classify the selected conventional economic tests presented in this section into three categories. The first is devoted to the cost-based test proposed by Areeda and Turner which subsequently proved the catalyst for the invention of a range of alternative tests. The immense theoretical and practical influence of their test justifies that it be accorded separate attention. The second category of tests evaluated involve other “bright line” tests where a single factor is employed as the primary tool for identifying predation. Williamson’s “output expansion rule” and Baumol’s “quasi-permanent price reduction rule” are evaluated under this category. The final category of tests reviewed fall under the general heading of “multifaceted evaluations”. The defining aspect of these tests is their reliance on a multitude of factors which are

¹⁴⁴ In addition to the original articles (*ibid.*), see, e.g., Brodley & Hay, *supra* note 14; Zerbe & Cooper, *supra* note 9; Hay, G.A., “A Confused Lawyer’s Guide to the Predatory Pricing Literature.” In Salop, S. (ed.), “Strategy, Predation, and Antitrust Analysis.” *Journal of Reprints for Antitrust Law and Economics*, 17(2), 1988, 155-202.

employed to determine the existence of predation. Tests are reviewed from Scherer (rule of reason), Joskow and Klevorick (two-tiered rule) and Ordoover and Willig (context specific rule). It should be noted this section is purely concerned with the performance of the selected tests in identifying game-theoretic predation. The examination is conducted within an idealised setting where practical considerations such as ease of administration and the magnitude of litigation costs are not relevant. In short, it is assumed that the tests, as analytical tools, can be accurately applied in practice. A discussion of the nature of judicially developed tests and their efficacy in identifying game-theoretic predation is left until part III.

2 The Areeda–Turner Test

The debate surrounding the optimal method of identifying predation essentially began with the publication of an article by Professors Areeda and Turner¹⁴⁵ (who are hereafter referred to as “A–T”) in 1975. Their objective was to “formulate meaningful and workable tests for distinguishing between predatory and competitive pricing by examining the relationship between a firm’s costs and its prices.”¹⁴⁶ The article represented the first formal attempt to provide a theoretical basis for a test of predation and this objective was sought by founding their test upon neoclassical price theory and welfare economics. Starting with the premise that society is best served when allocative efficiency is maximised, they argue that short-run marginal cost (MC) pricing will foster the desired maxima outcome although they acknowledge that maximising short-run welfare does not necessarily lead to long-run allocative efficiency.¹⁴⁷ A–T explicitly adopt a short-run framework on the grounds that “long-run [behavioural] possibilities must be disregarded because they are intrinsically speculative and indeterminate.”¹⁴⁸ Moreover, they consider predation to be a rare phenomenon.¹⁴⁹ This also justifies their focus on the short-run where the injury caused by predation is more prominent and reliable compared to uncertain long-run welfare effects. A–T have

¹⁴⁵ Areeda & Turner, “Predatory Pricing.” *Supra* note 143.

¹⁴⁶ *Ibid.*, at 699-700.

¹⁴⁷ *Ibid.*, at 711.

¹⁴⁸ Areeda & Turner, “Scherer Reply.” *Supra* note 143, at 897.

¹⁴⁹ Areeda & Turner, “Predatory Pricing.” *Supra* note 143, at 699.

refined their test over the period since it was first proposed but the maximising characteristic of MC pricing continue as the basis for their test.¹⁵⁰ The current test is structured as follows:¹⁵¹

- A short-run profit-maximising (or loss-minimising) price is legal, regardless of whether this price is below (any measure of) cost;
- A price above full cost is non-predatory even if it is not profit-maximising in the short-run;
- A price above reasonably anticipated short-run MC is non-predatory even if it is not loss-minimising in the short-run; and
- A price below reasonably anticipated short-run MC is predatory unless it is at or above full cost.

Recognising that MC data is unlikely to be easily obtained in practice, A-T employ average variable cost (AVC) as a surrogate for MC. The resultant tripartite test is:¹⁵²

1. Prices above reasonably anticipated AVC will be presumptively lawful;
2. Prices below reasonably anticipated AVC will be presumptively unlawful; and,
3. In any case, prices in excess of full cost are non-predatory.¹⁵³

The presumption of legality in the first part may be rebutted by proof that MC for the volume supplied during the predatory period “significantly” exceeds AVC.¹⁵⁴ The modifying term “reasonably anticipated” implies that the presumption of illegality in part two could be rebutted by proof of unexpected changes in demand or cost conditions caused price to fall below AVC.¹⁵⁵ And finally, although claims of “promotional pricing” and “meeting the competition” do not generally constitute defences to the second part, A-T would allow these defences to be employed where the

¹⁵⁰ The modifications introduced within the 1986 supplement to the Areeda and Turner treatise and subsequent supplements were devised by Philip Areeda and Herbert Hovenkamp. For the sake of simplicity and consistency, the revised test will continue to be referred to as the “A-T test”. No disrespect is intended by the omission of Hovenkamp.

¹⁵¹ Areeda, P. & Turner, D.F., *Antitrust Law*. Boston: Little, Brown & Co., 1978, at ¶711d.

¹⁵² *Ibid.*

¹⁵³ *Ibid.*, at ¶714.

¹⁵⁴ *Ibid.*, at ¶715d.

¹⁵⁵ See, *ibid.*, at ¶716; OECD, *Predatory Pricing*. *Supra* note 17, at 25.

alleged predator is a dominant multi-market producer which does not have a dominant position in the market in which they are allegedly engaging in predation.¹⁵⁶

Having outlined the structure of the A–T test, attention can now be directed to examining its efficacy in accurately identifying game-theoretic predation. From the review of game-theoretic predation models in chapter B, it should be evident that the A–T test (and for that matter, any test which solely employs a cost-based standard) will not accurately identify all welfare injuring game-theoretic predatory behaviour. Consider the imperfect information game-theoretic Deep Pocket predation models of Benoit, Fudenberg–Tirole, Bolton–Scharfstein, Poitevin and Saloner. In every case, there is no necessity that the predator, in order to successfully achieve their anticompetitive objective, need resort to sub-marginal cost pricing, or, for that matter, below-cost pricing at all. Instead, what is relevant is that the prey incurs a negative cash flow for a sufficient period of time to enable the informational asymmetry in question to work to the predator’s advantage.

It is appropriate to mention that A–T explicitly consider the scenario of the predator reducing price to a non-profit maximising level which is at or above average cost (AC) in response to *less* efficient entrants.¹⁵⁷ They adopt the uncontentious view that less efficient firms should not be protected from incumbents lowering prices in response to entry, and therefore that prices above AC should not be considered predatory.¹⁵⁸ Because of the existence of this conclusion, the A–T test cannot be criticised with respect to the Bolton–Scharfstein and Poitevin models. These models assumed that it was necessary for the prey to employ debt in order to remain in the market. In turn, the interest costs associated with the debt established the incentive for predation. The requirement that debt finance be utilised by the prey implicitly renders the prey less cost efficient than the predator. Therefore, given A–T do not consider pricing that is above the predator’s AC, yet which is below the prey’s AC, to be

¹⁵⁶ Areeda & Turner, *supra* note 151, at ¶719a.

¹⁵⁷ *Ibid.*, at ¶714.

¹⁵⁸ *Ibid.*, at ¶714a.

predatory, their test cannot be reasonably criticised on the grounds that the Poitevin and Bolton–Scharfstein models indicate that exit can be induced through such pricing.

In some cases (for example the Benoit and Fudenberg–Tirole models) it is possible that the necessary period of negative cash flows will be so long that the prey will also be incurring losses.¹⁵⁹ Where this is the case and the prey and predator are equally efficient, then the predator will have to resort to pricing below full cost in order to induce the exit of the prey. However, note that there is no requirement that the predator price below MC. Therefore, even if the A–T test was only designed to protect anticompetitive pricing which deterred the entry or induced the exit of equally efficient firms, it would not be infallible.

The A–T test fares equally poorly when it is evaluated with respect to the reputational predation models. Although the primary social detriment arising from such game–theoretic predation involves entry deterrence, where the predator actually engages in predation in order to establish or maintain their reputation, the more traditional harm of induced exit also occurs. Therefore, a dual detriment can arise in such models. However, as with the Deep Pocket models, the predatory price in the reputational predation models need not fall below marginal or full cost in order to be effective. Rather, what is required for successful reputational predation is for the price to be low enough that potential entrants do not expect to obtain a normal return for a sufficient period of time which will justify sinking the costs of entry. As Ordovery and Saloner note, “[s]uch prices bear no systematic relation to the incumbent’s AVC ”¹⁶⁰ and thus the A–T test will not be accurate in identifying all possible reputational predation strategies.

Finally, the A–T test can be ineffectual with respect to signalling models of predation. In complete contrast to the Deep Pocket and reputational predation models, the test is deficient with respect to signalling predation because it could result in the condemnation of welfare *enhancing* pricing behaviour. As shown previously, the net

¹⁵⁹ A firm experiencing negative cash flows need not concurrently be incurring accounting or economic losses. There is no direct short–run relationship between the cash flow associated with an expense (revenue) and the period it is actually incurred (earned). For example, the cash outflow for plant may be paid when the plant is purchased but the depreciation expense will be incurred over the life of the plant. In the long–run net cash flow will equate with profitability.

¹⁶⁰ Ordovery & Saloner, *supra* note 20, at 582.

welfare effect of signalling predation is ambiguous. Whether social welfare is improved or harmed depends on the relative magnitudes of the detriment (deterred entry) and the benefit (reallocation of resources to more profitable markets) caused by signalling. The extent to which the predator must reduce price for a credible signal is dependant on the market demand schedule and the duopolists' cost functions. Conceivably a credible signal could require that the predator reduce price below MC. However this would trigger the A-T test and in certain market environments, the test would condemn instances of predation which would be socially beneficial.¹⁶¹

3 *Alternative Single Factor Tests*

(a) **The Williamson Test**

Two concerns regarding the A-T test motivated Williamson¹⁶² to offer an alternative rule. First, Williamson rejects the contention by A-T that the short-run is the correct temporal focus by illustrating the benefits which firms can obtain (and the detriments which society can incur) through temporary price cuts to MC for the strategic purpose of deterring entry.¹⁶³ Second, Williamson claims that firms have an incentive to adapt their behaviour to legal restraints, and because such incentives exist, he argues that the economic consequences of predation rules must be evaluated in light of such behaviour adapting results.¹⁶⁴

¹⁶¹ This possibility clearly illustrates one of the benefits provided by the application of game theoretic tools to the analysis of predatory behaviour. A-T recognised that under market conditions of excess capacity (i.e. firms are producing below their minimum efficient scale), firms may be forced to price between AVC and AC until either demand increases or less efficient firms exit (Areeda & Turner, *supra* note 151, at ¶715a). They relied on this scenario (amongst others) to justify lowering the threshold for their test to MC (or in practice, AVC). However, the test would not be lowered further because conventional economic price theory argues that firms will minimise losses by shutting down rather than price below AVC. This logic reflects the static perspective employed in conventional economics. As the signalling predation models illustrate, adopting a dynamic perspective as is possible though game theory allows the conclusion that it can be rational (loss-minimising) behaviour for a firm to price below AVC.

¹⁶² Williamson, *supra* note 9.

¹⁶³ *Ibid.*, at 290. The short-run focus adopted by A-T also serves as grounds for criticism from, among others, Richard Posner (*supra* note 39, at 191-193). In order to capture strategic predatory conduct, Posner proposes that pricing below long-run MC coupled with predatory intent be presumptive evidence of predation. Unfortunately, although Posner's criticism is well directed, the economic analysis employed to justify his test is flawed (see Williamson, *supra* note 9, at 322.), and therefore, his test is not reviewed in this chapter. Posner later acknowledged his mistake although he reiterated his concerns about the inability of the A-T test to identify strategic predatory behaviour (see Posner, *supra* note 39, at 941-942). In any event, the long-run marginal cost portion of Posner's test is incorporated within Williamson's test and consequently the conclusions reached with respect to Williamson's test also apply to Posner's.

¹⁶⁴ Williamson, *supra* note 9, at 285.

Where predation is allegedly against a new entrant, Williamson would apply the following rule: a (demand adjusted) output expansion (within twelve to eighteen months of entry), or pricing below AVC, by a dominant firm following entry is predatory behaviour.¹⁶⁵ In the long-term a different rule is imposed whereby pricing behaviour which does not meet or exceed long-run AC will be predatory.¹⁶⁶ Applying these rules to the situation where an incumbent faces a new entrant, Williamson shows that the pre- and post-entry welfare properties of the output restriction rule are superior to those of the A-T test or a “no pricing below average cost” test.¹⁶⁷ Where the alleged predation is directed towards established firms, Williamson advocates a rule segregated by market conditions and time: in the “intermediate-run” when demand is “normal”, prices below short-run AC would be deemed predatory; when there is excess supply, prices below AVC are deemed predatory; and, in the long-run, prices below AC are deemed predatory.¹⁶⁸

When evaluated with regards to game-theoretic predation, Williamson’s rules are inaccurate for two reasons. Firstly, the long-term rule regarding predation against new entrants and the rules relating to predation against established firms are all cost-based tests and therefore exhibit all the deficiencies (and are subject to all the criticisms) of the A-T test. Second, the output expansion rule is inaccurate with respect to both signalling¹⁶⁹ and reputational predation. When predation is conducted for signalling purposes the rule will be overinclusive since proscribing all increases in output

¹⁶⁵ *Ibid.*, at 333-334. “Demand adjusted” implies that future demand be forecasted so that the incumbent firm be allowed to expand supply to maintain their pre-entry market share (*ibid.*, at 305-306).

¹⁶⁶ This alternative is justified on the basis that, in the long-run, an output restriction rule is more difficult to police and, *ceteris paribus*, established entrants should be able to compete effectively. As no separate rule is stipulated for the medium-term with respect to unilaterally implemented predation it can be inferred that the long-term rule begins at the end of the twelve to eighteen month period when the short-term output restriction rule is in operation.

¹⁶⁷ Williamson, *supra* note 9, at 306-315.

¹⁶⁸ *Ibid.*, at 337.

¹⁶⁹ Ordoover and Saloner, *supra* note 20, at 584-585. Arguably, if Williamson’s rule was in force and the market exhibited weak demand conditions equivalent to those in signalling models, then the incumbent would supply that quantity which would leave a residual demand which was insufficient for the potential entrant to supply profitably. This limit price would not necessarily be as low as the competitive price; however, neither would it be as high as the short-run profit-maximising price. Therefore, the limit price would be socially beneficial compared to the short-run profit-maximising price. The existence of the rule motivates the limit price; the incumbent cannot induce the exit of new entrants via predation, and must therefore adopt a pro-active stance by supplying a more competitive volume which is, of course, socially beneficial. Williamson explicitly identifies this effect on pre-entry output as a superior welfare property of his rule compared to the A-T test (Williamson, *supra* note 9, at 298-299). However, note that this logic is premised on an assumption of perfect information. With respect to the Roberts and Fudenberg-Tirole signalling models, the informational imperfection which necessitates signalling (*vis*, the prey’s uncertainty regarding profitability), also renders the deterrent effect of Williamson’s rule ineffectual since potential entrants will not recognise that the market demand (and similarly the limit price) is insufficient to sustain their presence.

following entry necessarily condemns instances of socially beneficial signalling. In fact, in some cases of signalling, the welfare properties of Williamson's test will be inferior to the A–T test. Given that some output expansion is required for effective signalling, where the level of the price reduction necessary to send a credible signal does not require sub–marginal (or AVC) cost pricing, in contrast to the A–T test, Williamson's test would condemn such beneficial behaviour.

With respect to reputational predation, the output expansion rule will be underinclusive. Consider the Milgrom–Roberts or Kreps–Wilson reputation models where, under certain conditions, it will be rational for an incumbent to predate in order to establish or maintain a predatory reputation from which they will benefit in other markets. Where the environmental conditions are such that it is rational for the incumbent to predate in perpetuity to protect their reputation,¹⁷⁰ there will be no expansion of output and thus the output expansion test is redundant. Invoking the presence of the long–run cost–based tests to overcome the impotence of the output expansion rule in regulating this example will be equally ineffectual. As was pointed out with respect to the A–T test, because the critical predatory price is a function of the *prey's* costs there is no systematic relationship between this price and the costs of the predator. The predator can successfully predate without incurring losses and the long–run test will be inadequate.

(b) The Baumol Test

Continuing the Williamson tradition, Baumol emphasises strategic concerns to justify proposing his “quasi–permanent price reduction rule.”¹⁷¹ This rule prohibits firms from raising prices for a period of five years after the exit of a competitor,¹⁷² although dispensation for price increases is given where the increase can be justified by autonomous changes in costs or market demand.¹⁷³ Additionally, Baumol proposes the operation of an underlying cost–based test based on “average incremental cost” (which

¹⁷⁰ See note 108, *supra*.

¹⁷¹ Baumol, *supra* note 143, at 2–3.

¹⁷² *Ibid.*, at 4.

¹⁷³ *Ibid.*, at 7.

closely approximates AC) in order to restrain firms from cross-subsidising losses in one market with profits in another.¹⁷⁴ These rules were purposely structured to allow for competitive price responses by incumbent firms to new entry (which Williamson's does not allow), whilst minimising the probability that such responses will be predatory by reducing the predator's opportunity to recoup predation-induced losses. Given the inverse relationship between market price and quantity supplied, it may appear that the Williamson and Baumol rules are essentially equivalent. However, this is not the case for the latter takes an *ex post* approach to predation by prohibiting a price increase *after* exit, whereas Williamson's output expansion rule prohibits quantity expansions *before* exit. This difference alters the welfare properties of the rules with the result that Baumol's rule is superior as regards allocative efficiency compared to Williamson's test (and the A-T test).

The differences between the quasi-permanent price reduction rule and output expansion rule are not sufficiently significant to preclude the same conclusion from being reached in relation to their ability to accurately identify game-theoretic predation. That is, the conclusions regarding the accuracy of the Williamson rule in identifying reputational predation may also be applied to the Baumol rule.¹⁷⁵ Where predation occurs in perpetuity, no price increase follows exit and the Baumol rule will be underinclusive. The supplementary average incremental cost test will not be effective in identifying the offending predatory behaviour for the same reasons that the A-T and Williamson cost-based tests are inaccurate

Additionally, Baumol's rule is insufficiently flexible to provide for socially beneficial signalling predation. As with Williamson's test, the extent of overinclusiveness exceeds that of the A-T test because Baumol's test does not allow for *any* increase in price, and thus, regardless of the critical predatory price required for a credible signal, the incumbent could not attempt to signal without incurring five years of

¹⁷⁴ *Ibid.*, at 10.

¹⁷⁵ See text accompanying notes 169-170, *supra*.

losses. In such cases it may be that it is not loss-minimising to signal and the duopolistic market will continue to misallocate resources through oversupply.¹⁷⁶

4 Multifaceted Evaluations

(a) The Scherer Test

Scherer was one of the first commentators to criticise the A–T test for its short–run focus and inadequacy with respect to harmful strategic predatory behaviour.¹⁷⁷ Arguing that there is no precise relationship between short–run monopolistic pricing and maximal long–run allocative efficiency, Scherer advocates that alleged predatory behaviour be assessed via “a thorough examination of the factual circumstances accompanying the monopolist’s alleged predatory behaviour, how the monopolist’s officials perceived the probable effects of its behaviour (i.e., intent), and the structural consequences actually flowing from the behaviour.”¹⁷⁸

Scherer’s rule of reason approach would obviously be optimal in accurately identifying all types of predatory behaviour. Every factor pertinent to an analysis of alleged predation would be identified and evaluated and an accurate decision obtained. Unfortunately, numerous costs and difficulties are associated with the practical administration of predation tests and these affect the optimality characteristics of all tests. In particular, the very expansive nature of the rule of reason which allows it to be so accurate in theory, also establishes it as the most difficult test to implement in practice. As a result, many commentators reject the rule of reason as a viable alternative for the identification of predation.¹⁷⁹

(b) The Joskow–Klevorick Test

Perhaps the most methodical and comprehensive attempt to explicitly incorporate all competing and conflicting factors impinging upon an optimal predation

¹⁷⁶ The argument that the Baumol rule would ensure that entry would never occur if only one firm could profitably exist within the market is not valid in the imperfect information environment inherent within signalling models (see note 169, *supra*).

¹⁷⁷ Scherer, *supra* note 56.

¹⁷⁸ *Ibid.*, at 890.

¹⁷⁹ See, e.g. Areeda & Turner, “Scherer Reply.” *Supra* note 143, at 897; Williamson, *supra* note 9, at 288; Easterbrook, *supra* note 9, footnote 123, at 318; McGee, *supra* note 23, at 307.

test was conducted by Professors Joskow and Klevorick¹⁸⁰ (hereafter referred to as “J-K”) in 1979. They define predatory pricing as:¹⁸¹

[B]ehaviour [which] involves a reduction of price in the short run so as to drive competing firms out of the market or to discourage entry of new firms in an effort to gain larger profits via higher prices in the long run than would have been earned if the price reduction had not occurred.

Holding the premise that predation is inherently harmful to society, J-K identify that the optimal predation test will minimise the magnitude of the detriment arising from two types of errors: (i) “false positive” errors (where competitive pricing behaviour is incorrectly identified as being predatory); and (ii) “false negative” errors (where predation is incorrectly identified as competitive pricing).¹⁸² They argue that the size of these errors’ social detriment is contingent upon particular market characteristics which J-K classify as: (i) factors indicative of short-run monopoly power; (ii) entry conditions; and (iii) factors impinging on dynamic and productive efficiency. For example, the greater the short-run market power exercised by a dominant firm, *ceteris paribus*, the smaller the costs of false positive errors and the greater the costs of false negative errors. The market power (by definition) enables the dominant firm to control short-run prices and therefore the increase in deadweight welfare loss after a successful episode of predation is likely to be small. Thus, the cost of false positive errors are smaller than if the predator had achieved its anticompetitive objective with insignificant market power. Conversely, the costs of false negative errors are positively related to market power since a failure to proscribe predation will result in the elimination of actual and/or potential competition which could have mitigated the market power of the predator. Therefore, the structure of the market is a critical determinant of the degree of harm which is inflicted upon society by a false positive or negative error.

J-K point out that the size of possible damage is not the only relevant consideration; the probability that these errors will actually be made is also important. They argue that this probability is a function of the propensity of the dominant firm to

¹⁸⁰ Joskow & Klevorick, *supra* note 143.

¹⁸¹ *Ibid.*, at 219-220.

¹⁸² Both types of error are inherently harmful to society. False positive errors result in a welfare loss from prices being maintained at levels in excess of those which would have prevailed had the error not occurred. Moreover, these errors may allow inefficient firms to remain, or may encourage the entry of such firms, with a resultant misallocation of resources. False negative errors are detrimental for the multitude of reasons that harmful predation is undesirable (see chapter A, *supra*).

engage in predation given the existence of a legal deterrent for such behaviour, the nature of the legal test, and the ability of the judiciary to accurately apply the test. By affecting a dominant firm's propensity for predation, the structure of the market also has an important influence on the probability of an error occurring. The propensity of a firm to engage in predation is a positive function of the expected profits which it will receive from the conduct. Where the market structure is amenable to successful predation, a dominant firm is more likely to engage in the conduct. However, this likelihood is mitigated by the existence of a legal deterrent to such conduct. The greater the probability that the legal test can accurately identify and punish offending conduct, the lower the expected profitability from engaging in the conduct. The nature of the legal test also affects the probability that errors will occur in the sense that the more comprehensive the examination, the lower the probability that erroneous decisions will be made. Lastly, there will exist a positive relationship between error rate and the degree of difficulty involved in applying the test to any particular set of circumstances.

The final factor which J-K identify as impinging on an optimal predation test involves implementation costs. Such costs include litigation and judicial costs and strategic adaptations such as prepositioning productive capacity for the purpose of deterring future entry or disciplining existing rivals. The magnitude of these costs are assumed to increase as the nature of the test moves away from a bright line standard to a rule of reason approach.

Having identified these conflicting costs as being relevant to any determination of an optimal predation test, J-K advocate a two-tiered test as the best means of identification. The first stage involves an examination of the structure of the market and the alleged predator's market power to determine whether it may be reasonably expected that predation by the defendant would significantly harm society.¹⁸³ This investigation serves to identify those cases of alleged predation which would be costly to society if they were incorrectly identified as instances of competitive pricing. Unmeritorious claims would be filtered out and only those cases which constituted the

¹⁸³ Joskow & Klevorick, *supra* note 143, at 244.

greatest potential harm to society would pass onto the second stage. In stage two, the pricing behaviour at issue is evaluated via a number of cost-based tests:¹⁸⁴

- Pricing below AVC would be deemed predatory;¹⁸⁵
- Prices between AVC and AC are presumed predatory. Proof of a declining industry or new entry on a scale which depressed price would be sufficient to rebut the presumption; and,
- Price decreases to a level in excess of AC are presumptively legal unless reversed within two years. Such a reversal will switch the presumption to one of illegality and this may only be rebutted by proof of increases in demand or costs of production.

One advantage of the J-K two-tiered test is that the structure allows for the examination of the market's informational characteristics in the first stage. Such an examination would operate as part of the filtering process, and would involve screening cases of alleged predation on the basis of how amenable the information environment was to successful predation. The examination would not increase the accuracy of the J-K test in identifying predation because the findings would not be incorporated within the determinative second stage; however, knowledge of the information environment would reduce the probability of seriously detrimental false errors being made (which is the primary objective behind the J-K test). J-K actually prescribe investigating "the nature of information flows in the market and, in particular, the availability of information concerning the perceptions of risks of entry."¹⁸⁶ In explaining their reasons for including this factor, J-K hint at the importance of informational imperfections within scenarios which resemble reputational and signalling predation. However, they fail to address the question of how the "nature of information flows" and "the availability of information concerning the perceptions of risks of entry" are to be assessed in any market. When one considers the actual significance of a market's informational characteristics to the rationality of predation, this question assumes even more importance.

¹⁸⁴ Ibid., at 249-258.

¹⁸⁵ Joskow and Klevorick do allow one defence to this rule (ibid., at 251, note 77) which is unimportant for the purposes of this thesis and likely to be rare in any event.

¹⁸⁶ Ibid., at 230.

J–K do make a vague reference to the relevance of “other evidence that could inform the court about the intent and effects of the pricing behaviour”¹⁸⁷ and whilst they state that an examination of such evidence would be allowed under their approach, it is not stated how this examination would be conducted nor how the findings would be incorporated within the ultimate determination of legality. Given the comparatively minimal discussion assigned to this “other evidence”, it may be inferred that the cost-based tests are the principal test of legality in stage two. However, this renders the J–K framework susceptible to the generic criticisms of such tests. Specifically, note that the cost-based tests adopted by J–K are closely related to tests by A–T, Williamson, and Baumol. The deficiencies associated with these tests with respect to accurately identifying game-theoretic predation have already been discussed and may equally be directed at J–K’s stage two cost-based tests.

(c) The Ordovery–Willig Test

Ordovery and Willig (hereafter referred to as “O–W”) do not advocate a specific predation test, *per se*; rather, they attempt to present an all-inclusive definition of predatory behaviour from which appropriate tests may be derived to evaluate any particular instance of allegedly predatory conduct.¹⁸⁸ They define predatory behaviour as “a response to a rival that sacrifices part of the profit that could be earned under competitive circumstances, were the rival to remain viable, in order to induce exit and gain consequent additional monopoly profit.” Focusing solely on exit inducing behaviour, the definition prompts the question: Viewed *ex ante* and assuming the entrant had not exited, was there a more profitable alternative response to entry? A positive answer would indicate predatory conduct; that is, the actual sacrifice of profit in response to entry must have been motivated by the desire for monopoly profits following the exit of the entrant.

O–W argue that certain structural characteristics—*inter alia*, a horizontally concentrated market; “entry hurdles” (sunk costs required to be incurred to enter the

¹⁸⁷ *Ibid.*, at 259.

¹⁸⁸ Ordovery & Willig, *supra* note 143, at 14.

market); and re-entry barriers¹⁸⁹—are necessary for conduct to violate their standard of predation. They propose that a structural examination (akin to the first stage analysis proposed by J–K) be conducted prior to the determination of whether any predatory sacrifice of profit has occurred.¹⁹⁰ Once the requisite structural factors are found to exist, an attempt is made to identify more profitable responses to entry which could have been adopted by the incumbent. The existence of more profitable alternatives is evidence of a sacrifice of profits.

Instead of conducting an investigation into whether a response to entry breaches some fixed criterion, whether it be cost-based or involve a multifaceted investigation, O–W infer whether the response is predatory from the range of alternative responses available to the incumbent when entry occurred. In some circumstances, cost-based tests will be the appropriate tools for determining the existence of a more profitable alternative; in other situations—where the price cut has intertemporal demand effects (e.g. promotional pricing) or does not fall below AC—a more extensive examination will have to be conducted to determine the long-run profitability effects of the response and the existence of any feasible alternatives which would have been more profitable.

The O–W test is similar to Scherer’s rule of reason as it allows for an unrestrained examination of the market conditions. The difference between these tests lies in their method of identifying predation. Whereas Scherer would examine factors such as intent, market structure and the resultant market state in order to infer predatory conduct directly, the O–W test allows these factors to be used when examining whether more profitable responses were available. If no such alternatives existed, the allegations of predation would be rejected. The same conclusion is warranted regarding the efficacy of the Scherer and O–W tests in accurately identifying game-theoretic predation (although it must be remembered that the O–W test is restricted to exit-inducing predation).

¹⁸⁹ *Ibid.*, at 11-12.

¹⁹⁰ *Ibid.*, at 12-13.

5 Conclusion

The “perfect” predatory pricing test would correctly identify all non-welfare maximising predatory behaviour at zero administrative cost. In reality, this test is a myth. Even if economic theory could specify exactly what constitutes socially detrimental pricing behaviour (which is doubtful), the resources required to accumulate and process the necessary data to ensure that an accurate decision is made in every instance of alleged predation are beyond the capabilities of current technology. These deficiencies mean that erroneous decisions will be made and social and administration costs will be incurred in conducting any inquiry into the validity of any allegation of predation. The optimal “pragmatic” test of predation represents a trade-off between the ease of administration and the welfare-maximising characteristics of the test such that the costs of false positive and negative errors and administration are minimised.¹⁹¹

Unfortunately, because these costs cannot be empirically measured, there is no way of knowing the structure of the test which has this cost-minimising characteristic. As a result, every proposed predation test is inherently subjective. The structure of each test is a product of its inventors’ opinions regarding the ease of administration and welfare effects of the proposed test and the alternatives. Additionally, the ultimate form of any test is shaped by the theoretical economic model employed as the basis for the test and certain assumptions regarding market characteristics and behaviour (e.g. the prevalence of different types of predation) which are held by the test’s proponents.¹⁹²

The practical considerations which influence the form of predation tests must be kept in mind when such tests are being evaluated for their efficacy in accurately identifying game-theoretic predation. That is, the evaluation conducted in this section is theoretical in nature and the practical difficulties involved in applying the tests have not been considered. This precludes any conclusion regarding the overall optimality characteristics of these tests. However, the capacity for accurate identification is itself

¹⁹¹ See text accompanying note 182, *supra*.

¹⁹² For a discussion of the factors which have resulted in the divergent tests proposed by different commentators, see Joskow & Klevorick, *supra* note 143, at 214-217. See, also Areeda, P. & Hovenkamp, H., *Antitrust Law (Supp. 1993)*. Boston: Little, Brown & Co., 1993, at ¶714.5.

an important factor in the optimality of any test, and if it is assumed that there do exist instances of game-theoretic predation, then the present evaluation is important.

Aside from the Scherer and Ordovery–Willig tests,¹⁹³ every test reviewed has been shown to exhibit deficiencies when applied to game-theoretic predation models. The degree of inadequacy decreases as the nature of the test moves from a single criterion (such as A–T’s cost-based tests, Williamson’s output expansion rule or Baumol’s quasi-permanent price reduction rule) towards a rule of reason approach and only the latter can be accurate in identifying game-theoretic predation. It is hardly surprising that the bright line tests which are reviewed do not perform well. Most of the tests were developed to identify conventional models of predation and, as has been shown, these models differ markedly from game-theoretic predation models with regards to the prerequisites for rational predation. Furthermore, the diverse environments in which predation is rational implies that no bright line test will ever be perfectly accurate. Whilst the Williamson and Baumol rules attempted to encompass strategic predatory behaviour, both were developed before the principal contributions which rationalised reputational and signalling predation, and neither test is sufficiently flexible to accurately identify these types of game-theoretic predation.

The bright line tests all emphasise criteria which have no systematic relationship with the informational environment; this being the crucial element which makes game-theoretic predation models rational. Until an evaluation of this element is explicitly incorporated within the process of identifying predation, socially detrimental game-theoretic predation can be employed without the fear of prosecution and socially beneficial predation will be condemned. In the absence of the invention of a bright line test that can identify both conventional and game-theoretic predation, the rule of reason approach would appear to be the only method of identification with the necessary flexibility to accurately identify all types of predatory pricing behaviour.

¹⁹³ Scherer’s rule of reason approach has been criticised for a lack of administration (see note 179, *supra*). Similar criticisms have been directed at the O–W test (see Ordovery & Saloner, *supra* note 20, at 588).

Conclusions

At this juncture, it is appropriate to step back and examine the implications of the preceding sections. Chapter A identified numerous societal values, reflected within the goals of antitrust legislation, which may be detrimentally affected by successful predation. Although the debate regarding the relevant goals of antitrust law continues unabated—it is inherently subjective, and therefore, will never be definitively settled to everyone’s satisfaction—this issue is irrelevant to whether it is valid for society to be concerned about the practice of predation. As was shown, every value and goal proposed will be harmed by successful predatory pricing. Society has cause to be concerned.

The objective of chapter B was to determine, at a theoretical level, whether society should proscribe predation. Assuming rational market participants, this topic reduces to answering the question: Is predatory pricing rational behaviour? Conventional economic analyses of predation established (although did not prove) that, for all intents and purposes, such behaviour could never be rational. The strength of these irrationality arguments created a mind set among many commentators, practitioners and judges such that allegations of predation were (and are) viewed with substantial scepticism. Where a presumption of irrationality underlies this belief, this scepticism is now untenable. Game-theoretic predation models *prove* that predation, in many guises and within diverse environments, can be feasible, profitable and optimal—predatory pricing can be rational behaviour.

Despite the general scepticism surrounding examinations of alleged predation, conventional economic tests were (and are) employed to determine the validity of these allegations. As chapter C patently illustrates, these tools are generally unreliable. Most of the tests, including the widely employed A–T test, will not accurately identify instances of game-theoretic predation. They are insufficiently flexible to incorporate

the subtle, yet critical, information imperfections which establish the possibility of these types of predation being rational.

The conclusions of the preceding chapters highlight the significant contributions provided by game theory to the “economics of predatory pricing.” The overriding implication is that for an accurate determination of the legality of alleged predation the informational characteristics of the relevant market *must* be assessed. Yet this conclusion begs the question: How can the nature of the information environment be determined in practice? The difficulties in determining who knew what, when they knew it, and how this affected the decision-making process appear insurmountable. Moreover, to be of benefit, the information examination would have to be precise. Even minute differences regarding which player knows what or when they came into the possession of some fact can be determinative of the rationality of predation in any particular case.

As is often the case, putting theory into practice may involve substituting pragmatic solutions for theoretical exactitude. Bright line tests are theoretically inadequate. Relative to more expansive investigations, however, they undoubtedly provide the practical benefit of certainty and consistency. Yet their inflexibility counteracts these benefits. Their scope is too restrictive to encompass the diverse range of strategic predatory behaviour which can be implemented by organisations. In fact, in some instances their very presence may be detrimental to society, for, as Easley, *et al.* have noted, “some bright-lines may constitute the instruction manual on how to prey with impunity.”¹⁹⁴ Rule of reason tests present themselves as the logical alternative.¹⁹⁵ Such examinations, by definition, would allow for an evaluation of the extent to which the relevant information environment is amenable to predatory behaviour. Instances of predation which adopt the character of game-theoretic predatory pricing models would then be identifiable, and the social detriment caused by such predation could be deterred.

¹⁹⁴ Easley, *et al.*, *supra* note 14, at 457.

¹⁹⁵ Rule of reason tests will ensure accurate determinations of legality only if the practical difficulties of employing such tests are ignored. A number of commentators have argued that these difficulties are so great that a rule of reason is not a viable alternative (see note 179, *supra*).

PART III

Contemporary Judicial Approaches to Predatory Pricing

CHAPTER A

The Rationality of Proscribing Predatory Pricing

CHAPTER B

An International Comparison of Contemporary
Judicial Decisions

Introduction

Allegations of predation are ultimately decided by the judiciary. Irrespective of any conflict or contention within the theoretical arena of a subject, where conduct is perceived to breach a law, the courts must frame pragmatic solutions in order that the law may be upheld. Although the courts will acknowledge and appreciate the academic contributions regarding relevant aspects of the conduct at issue, for reasons of pragmatism and personal judgment, the tests and rules enunciated by the judiciary may nevertheless differ substantially from those proposed by academic commentators. An investigation of contemporary judicial analyses of predatory pricing is therefore relevant to the purpose of this thesis. By analysing the methods and tools currently employed within relevant jurisdictions to evaluate the legitimacy of predatory pricing allegations, conclusions may be obtained regarding the general theoretical and pragmatic efficacy of these rules. These conclusions may then be incorporated within any recommendation regarding the efficacy of section 36 of the *Commerce Act* in proscribing predatory pricing. Furthermore, having found that conventional economic predation tests are generally inadequate tools for identifying game-theoretic predation, to the extent that the “pragmatic” tests employed by judiciaries differ from these “theoretical” tests, it is appropriate to investigate the efficacy of pragmatic tests in accurately identifying game-theoretic models of predation.

Arguably, the most important foreign jurisdictions influencing New Zealand competition law are the United States, the European Community, and Australia. The greatest volume of antitrust (and predatory pricing) litigation and scholarship within any single jurisdiction emanates from the United States. This volume provides the United States with a comparative advantage for it enables antitrust theories to be aired and critically appraised within the courts more frequently, and thereby expedites the incorporation of appropriate theories within judicial tests of allegedly anticompetitive conduct. To the extent that it is valid to import these theories and tests, either as a whole or adapted for New Zealand conditions, then the New Zealand courts can (and

should) benefit from the United States judiciary by acknowledging this source and utilising the tools developed.

Section 36 of the *Commerce Act* is a direct descendant of Art. 86 of the E.E.C. *Treaty of Rome*. Despite differences in construction, there remain legal issues of direct relevance to the interpretation and application of §36 which may be obtained from case law dealing with Art. 86. Similarly, there are direct links between §36 and §46 of the Australian *Trade Practices Act* 1974. The New Zealand judiciary, having recognised this relationship and acknowledged the stated desire of the respective governments to harmonise trans-Tasman competition law as part of the *Australia/New Zealand Closer Economic Relations Trade Agreement*, has frequently reviewed and cited the dicta of Australian decisions where appropriate. Given the lack of New Zealand litigation on predatory pricing, in the event that such a case arose under the *Commerce Act*, it is probable that the Australian judicial decisions on predation would be the point of first reference for the New Zealand courts. Therefore, it is appropriate to conduct an examination of the methods and rationale employed by the Australian judiciary to evaluate the validity of a predation claim.

The primary purpose of this part is to comprehensively review the most recent predatory pricing cases conducted within the highest court of each of the three abovementioned jurisdictions. This part is structured in four chapters. Following the introduction, chapter A will examine the rationality of proscribing predatory pricing. A number of prominent commentators have proposed that all pricing should be *per se* legal. They argue that because predation is a rare behaviour and due to the extreme difficulty faced by courts in distinguishing between predatory and competitive pricing, the costs of proscribing predation will outweigh the benefits. If these arguments are valid, an evaluation of contemporary judicial predatory pricing decisions would be irrelevant for the conclusion of the thesis would warrant proposing the *per se* legality of all pricing. It is, therefore, necessary to consider and rebut this argument for *per se* legality before conducting any evaluation into contemporary judicial tests of predatory conduct.

The substantive issues of part III will be analysed in chapter B. After briefly outlining the history of judicial tests for predation in the three jurisdictions in section 1, the three case studies will be performed in sections 2, 3 and 4. The first (and most recent) case reviewed is *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*¹ which was decided by the United States Supreme Court in 1993 and involved allegations of predatory pricing with regards to generic cigarettes. The second case, *AKZO Chemie BV v. E.C. Commission*,² is a decision by the European Court of Justice made in 1991 and arose as a result of allegations by Engineering and Chemical Supplies (Epsom and Gloucester) Limited that AKZO Chemie BV had engaged in predatory pricing involving benzoyl peroxide, an organic peroxide used as a bleaching agent in the flour and plastics industries. The final case, *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*,³ involved allegations predatory pricing within the Sydney newspaper industry and was decided by the Full Federal Court of Australia in 1992. The purpose in conducting each case study is twofold. Firstly, each decision will be subject to a general critique. This will provide an opportunity to discuss the cases in light of case commentaries and to identify the implications of these decisions and any international or infra-jurisdictional trends in predatory pricing analysis. Such a critique is, by itself, beneficial because these decisions are so recent and therefore case commentaries are relatively scarce. The second objective behind conducting the case studies focuses on the tests adopted by each judiciary. Each decision will be critically examined for the underlying rationale behind the test(s) employed and the efficacy of these tests in accurately identifying both conventional economic and game-theoretic models of predation. The conclusions derived from these examinations will complement the theoretical conclusions obtained from part II by providing the pragmatic basis for any recommendations made in part IV.

¹ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.* 1993-1 Trade Cases ¶70,277.

² *AKZO Chemie BV v. E.C. Commission* [1993] 5 C.M.L.R. 215.

³ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.* (1992) A.T.P.R. ¶41-167.

A

The Rationality of Proscribing Predatory Pricing

All socially detrimental behaviour deserves condemnation. To this end, laws are enacted to ensure that such morally reprehensible behaviour is punished and to act as a deterrent by imposing costs on the offender which exceed any benefit derived from committing the offence. However, not all socially detrimental behaviour warrants proscription. Condemnation is inexpensive and an erroneous condemnation is easily and, at least to the more humble accusers, cheaply recanted. Conversely, proscription can be expensive in terms of litigation, judicial and enforcement costs and often the costs of erroneous decisions are not easily nor inexpensively rectified. No matter how serious the offence against society, proscription is only justified when the expected costs involved are exceeded by the benefits derived from prohibition. And, as with many cost–benefit analyses, weighing the scales is complicated by the difficulty in estimating not only the resource costs but the value of intangible benefits.

Predatory pricing has no special attribute which exempts it from a cost–benefit analysis when the issue of concern is whether or not it should be proscribed. There are four relevant costs to be considered:⁴ (i) the cost incurred when competitive pricing is erroneously labelled as being predatory (i.e. false positive errors); (ii) the cost incurred when predatory pricing is incorrectly labelled as competitive (i.e. false positive errors); (iii) the pure administrative costs involved in litigating, judging and enforcing predation cases; and (iv) the costs of eschewed competitive price reductions due to business uncertainty regarding the legality of the pricing behaviour, purely unmeritorious suits brought for harassment purposes, and adapted business behaviour which is undertaken

⁴ The most formal and methodical analysis of these costs is that undertaken by Joskow, P.L. & Klevorick, A.K., “A Framework for Analysing Predatory Pricing Policy.” *Yale Law Journal*, 89(2), 1979, 213-270. See also, Areeda, P. & Hovenkamp, H., *Antitrust Law (Supp. 1993)*. Boston: Little, Brown & Co., 1993, at ¶714.5.

in order to decrease the firms vulnerability to legal sanctions whilst still achieving an anticompetitive outcome. The optimal rule will minimise the aggregate of these costs; however, no single rule performs well on all factors.⁵ For example, it may be argued that as the tests move from a bright-line tests to rule of reason examinations, while the probability of erroneous decisions (and therefore the corresponding costs of such decisions) decrease, the costs involved with administration and uncertainty increase. In fact, it is not even certain that more accurate decisions will be made with rule of reason tests for such examinations are inherently more complex than bright-line tests. A more expansive investigation will theoretically capture a greater proportion of undesirable behaviour, but in practice such an outcome is not necessarily guaranteed. As a theoretical exercise, the optimal rule could be determined by conducting a comparative experiment of the aggregate costs associated with each proposed test and selecting that which minimised the costs. However, accurate measurements of these costs are impossible. Ultimately, the value of any test will depend on a subjective assessment of that test's ease of administration, extent of inclusiveness and the incidence of predation. The great debate surrounding the relative superiority of different tests is testimony to this subjectivity.

One approach, advocated by such eminent commentators as McGee, Bork and Easterbrook, is that predatory pricing should not be illegal. Invoking a range of conventional economic irrationality arguments as evidence, they conclude that the requisite conditions for profitable predation will occur so infrequently in reality that predation will be rarely attempted and even less frequently successful.⁶ Furthermore, they claim that the inherent similarities between predation and "hard" competition necessarily implies that it will be extremely difficult for courts to distinguish between

⁵ Joskow & Klevorick, *ibid.*, at 242-243.

⁶ McGee, J.S., "Predatory Pricing Revisited." *Journal of Law and Economics*, 23, 1980, 289-330, at 291-300; Bork, R.H., *The Antitrust Paradox*. New York: The Free Press, 1993, at 147-154; Easterbrook, F.H., "Predatory Strategies and Counterstrategies." *University of Chicago Law Review*, 48, 1981, 263-337, at 265-303. Although it has been claimed that these commentators reject the need for proscribing predation because they perceive such behaviour as *irrational*, this is untrue. All three commentators either explicitly or implicitly acknowledge that predation can be rational if conducted within particular market conditions: "These considerations do not demonstrate that price cutting could never under any circumstances be a successful method of predation." (Bork, *ibid.*, at 154.); "It is conceivable that predation could be profitable." (Easterbrook, *ibid.*, at 268.); McGee does not explicitly state that predation will never be rational. Rather he doubts whether "predatory pricing is, is likely to be, or has ever been a significant clog on the competitive process." (McGee, *ibid.*, at 300.) Rather, they justify their proposal for *per se* legality of all pricing behaviour on the opinion that the conditions conducive to rational predation occur rarely in reality.

beneficial and socially detrimental pricing.⁷ The combination of these arguments, in addition to a desire to maintain firms' freedom to price aggressively in response to competition, justifies, in their opinion, a rule of *per se* legality for predatory pricing behaviour. The essence of their argument is concisely encapsulated by Easterbrook's concluding comments:⁸

Conduct that might be predatory *always* involves lower prices, greater output, innovation, or other features that usually increase consumers' welfare. Any attempt to administer a rule against predation entails a significant risk of condemning the outcome of hard competition. The costs of litigating predation cases are staggering; no more complex cases could be imagined. And although a given price reduction or addition to plant *could* be predatory, it almost certainly is not. . . . If there is any room in antitrust law for rules of *per se* legality, one should be created to encompass predatory conduct. The antitrust offence of predation should be forgotten.

If one accepts the assumptions that predation is rare and that the courts are unable to accurately identify predatory pricing, the argument that predation should not be proscribed is persuasive. These assumptions, however, are subject to criticism. The difficulties involved in empirically testing for the existence and success of predation were discussed at some length in part II. It was concluded that the rationality of predation would not be determinable through empirical studies, and that the plausibility of predation occurring is dependant upon the assumptions and logic of the model in question and the probability of the necessary conditions for profitable predation occurring in reality. McGee, Bork and Easterbrook employ a range of conventional economic irrationality arguments to substantiate their "no rule" proposal. Yet, as has been shown, a number of these arguments are invalid if the implicit perfect information environment is replaced by an environment containing informational imperfections. Game theory has provided a range of new environmental conditions when predation will be rational and thereby has increased the probability that predation will be employed. Nevertheless, as Philips notes, ". . . we do not and cannot know how rare predation actually is."⁹ The contention that predation is rare may still be made; however, given that this cannot be proven and that a range of new (and arguably more realistic) conditions under which predation will be rational behaviour have been identified, this

⁷ McGee, *ibid.*, at 326; Bork, *ibid.*, at 154; Easterbrook, *ibid.*, at 313.

⁸ Easterbrook, *ibid.*, at 336-337 (emphasis in original).

⁹ Philips, L., *The Economics of Imperfect Information*. Cambridge: Cambridge University Press, 1988, at 232.

claim cannot have as much force as it held prior to the application of game theory to the topic of predatory pricing.

The second basis for advocating the *per se* legality of predatory pricing—that the courts cannot accurately identify predation—is difficult to rebut directly. The great difficulty in framing a theoretically grounded and practically administrable test which is accurate, inexpensive to administer and provides business certainty has already been alluded to. The analysis in part II clearly identified the inadequacies of the bright-line tests in identifying game-theoretic predation. Moreover, the broad-based tests (such as the rule of reason) would appear to fare little better in this task because it is necessary, but extremely difficult, to identify and determine the influence of the information environment in any particular case. In recognition of this problem, support for *per se* legality of predation has recently been provided by two prominent game-theorists, Paul Milgrom and John Roberts. They do not justify their position on the basis that predation will infrequently be rational, but rather, they concur with the second argument of the “no rule” proponents that the evidentiary difficulties are presently too great for accurate identification.¹⁰

It cannot be doubted that allegations of predatory pricing will involve often complex evidential investigations in order to ensure that an accurate decision will be made. Nevertheless, the probability that erroneous decisions will significantly harm society can be mitigated by deliberately employing conservative tests. For example, Areeda and Turner deliberately restricted their test with the knowledge that it would be underinclusive in some instances in an attempt to ensure that vigorous but innocent price competition would not be constrained. Similarly, the J-K two-tiered test was explicitly developed to minimise the probability that society will be significantly harmed from erroneous court decisions. Therefore, conservative tests, although not perfect, will accurately identify a number of instances of predation which, had they not been proscribed, would have harmed society.

¹⁰ Milgrom, P. & Roberts, J., “New Theories of Predatory Pricing.” In Bananno, G. & Brandolini, D. (eds.), *Industrial Structure in the New Industrial Economics*. Oxford: Oxford University Press, 1990, 112-137, at 134; Roberts, J., “Battles for Market Share: Incomplete Information, Aggressive Strategic Pricing, and Competitive Dynamics.” In Bewley, T.F. (ed.), *Advances in Economic Theory*, Cambridge: Cambridge University Press, 1987, 157-195, at 186.

Another argument in favour of proscribing predation is the beneficial deterrent effect of prohibition. As Professor Schmalensee notes:¹¹

The apparent infrequency with which predatory pricing is attempted cannot be totally unrelated to the courts' hostility toward the concept and to the propensity of small firms to allege predation. Furthermore, not all cases of predatory pricing are identical; judicial error is much more likely in some than in others. It is at least plausible that the removal of predatory pricing from the list of proscribed antitrust practices would produce some cases that any reasonable person could distinguish from innocent competition.

Although the deterrent benefit of proscription would appear to be a valid reason for maintaining at least a conservative rule, Easterbrook rejects this argument on the following grounds:¹²

There are few, if any, examples of profitable predation before the Sherman Act or in other countries, despite the absence of laws against the practice. Moreover, no deterrent is perfect; some persons always will conclude that they can make more by violating the rules than they stand to lose in penalties. . . . All that the prohibition does is prevent minimally or moderately rewarding predatory conduct. The litigated cases therefore should involve the most egregious instances of predation, that is, the ones most profitable to the predator. An examination of these cases should disclose whether predation is a serious problem.

Easterbrook continues by citing two cases which he considered "seem to present the best chances for a finding of profitable predation: one case in which a firm cut price below marginal cost, and another in which a firm drove a rival out of the market"¹³ In neither case did the courts find the allegations of predation justified. Thus, despite having the greatest probability of discovering predation, the allegations proved unfounded.

Easterbrook's argument is not definitive. In order to substantiate his proposal for making predation *per se* legal, he argues that the courts are unable to accurately identify the behaviour. Yet this same opinion can be employed to rebut his claims that "[t]here are few, if any, examples of profitable predation before the Sherman Act or in other countries, despite the absence of laws against the practice,"¹⁴ and that predation is not a serious problem because the courts did not uphold the allegations of predation in

¹¹ Schmalensee, R., "On the Use of Economic Models in Antitrust: The *Realemon* Case." *University of Pennsylvania Law Review*, 127, 1979, 994-1050, at 1028.

¹² Easterbrook, *supra* note 6, at 315.

¹³ *Ibid.*, at 316.

¹⁴ *Ibid.*

the litigated cases which he reviewed “which should involve the most egregious instances of predation.”¹⁵

The argument that predatory pricing should be *per se* legal is not without some merit; however, the two bases upon which it is justified are assumptions which are unlikely to be able to be definitively proven to be true or false. For this reason, and because of the beneficial deterrent effect of proscription, it is submitted that predatory pricing warrants prohibition. Indeed, this opinion is implicitly reflected in the antitrust legislation of many jurisdictions which contain a variety of provisions condemning, *inter alia*, predatory behaviour. To the extent that such provisions reflect the sentiment of the public at large towards predatory behaviour, then it must be that the majority consider the potential costs to be outweighed by the benefits of proscription. In a democracy, such a majority opinion rules and it is to this law that McGee concedes in the following statement:¹⁶

Although I believe that Bork’s analysis and conclusions are right, we are unlikely to have no rule at all. . . From the beginning, antitrust has been concerned with predation, and for many years offered vague, ill-specified, ad hoc, and often hurtful pronouncements based on fanciful economics, if upon any economics at all. Like it or not, we have and are likely to continue to have some kind of legal ‘rules’ to punish predation. Firms will continue to fear and actually to [sic.] be beset by costly complaints that they are predators. As a practical matter, I am afraid that the best we can do is to resist the worst rules and work to achieve as good rules as we can.

¹⁵ Ibid.

¹⁶ McGee, *supra* note 6, at 317.

B

An International Comparison of Contemporary Judicial Decisions

1 Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.

(a) Judicial Predatory Pricing Tests in the United States

The history of predatory pricing tests employed by the United States courts may be segregated into three distinct periods: (i) pre-1975; (ii) the period from 1975 until 1986; and (iii) the period from 1986 until the present day. The 1975 and 1986 divisions relate to the publication of the original A-T standard and the Supreme Court decisions in *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*¹⁷ and *Cargill, Inc. v. Monfort of Colorado, Inc.*,¹⁸ respectively. Allegations of predation are usually brought under either §2 of the *Sherman Act*¹⁹ or §2(a) of the *Clayton Act* as amended by the *Robinson-Patman Act*.²⁰ Section 2 of the *Sherman Act* prohibits monopolisation, attempts to monopolise, and combinations and conspiracies to monopolise.²¹ The *Robinson-Patman Act* proscribes price discrimination which would substantially lessen

¹⁷ 475 U.S. 574 (1986).

¹⁸ 479 U.S. 104 (1986).

¹⁹ Section 2 of the *Sherman Act* states:

Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States . . . shall be deemed guilty of a felony . . .

²⁰ Section 2(a) of the *Clayton Act* as amended by the *Robinson-Patman Act* states:

It shall be unlawful for any person engaged in commerce . . . to discriminate in price between different purchasers of commodities of like grade and quality . . . where the effect of such discrimination may be substantially to lessen competition or tend to create a monopoly in any line of commerce . . .

²¹ The Supreme Court held in *United States v. Grinnell Corp.* (384 U.S. 563 (1966)) held that “[t]he offence of monopoly under § 2 of the *Sherman Act* has two elements: (1) the possession of monopoly power in the relevant market and (2) the wilful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” (Ibid., at 570-571.) Attempted monopolisation also requires two elements to be proven: (1) specific intent to achieve monopoly power; and (2) a dangerous probability of actual monopolisation (see *Swift & Co. v. United States* 196 U.S. 375 (1905) at 396).

competition or tend to create a monopoly.²² Although the prerequisites for illegality under these sections differ, since 1975 most courts have adopted the same approach to determining the existence of predation regardless of which statute the allegations are made under.²³

Although A–T’s 1975 publication is generally considered the starting point of discussions on judicial acceptance of cost–based predatory pricing tests, the usefulness of such tests had been recognised by the courts for some time. For example, in *Utah Pie Co. v. Continental Baking Co.*,²⁴ decided in 1967, the Supreme Court implied an average cost standard when they observed that the defendant’s price “was less than its direct cost plus an allocation for overhead.”²⁵ This standard was, however, vague and ill–defined. The court did not identify or propose any formal theoretical basis for the relevance of a cost–based test, nor did it stipulate what measure of cost was relevant or whether a cost–based standard acted as presumptive, definitive or supplementary evidence of the existence of predation.²⁶ Rather, as was the convention in predatory pricing cases of that era brought under the *Robinson–Patman Act*, evidence of “below cost” pricing provided some grounds for an inference of predatory intent²⁷ which, in turn, was used to infer competitive harm.²⁸ Charges of predation brought under §2 of the *Sherman Act*, however, were assessed with regard to the effect on competition, which was viewed primarily in terms of the effect of the conduct upon market structure. Nevertheless, evidence of “below–cost” pricing was also relevant in such cases.²⁹

²² There exist two elements for liability under the *Robinson–Patman Act*: (i) evidence of price discrimination, which in the context of the Act simply means a price difference (see *FTC v. Anheuser–Busch, Inc.* 363 U.S. 536 (1960), at 549); and (ii) a reasonable possibility of substantial injury to competition (see *Falls City Industries, Inc. v. Vanco Beverage, Inc.* 460 U.S. 428 (1983), at 434).

²³ Goldstein, J.L., “Single Firm Predatory Pricing in Antitrust Law: The *Rose Acre* Recoupment Test and the Search for an Appropriate Judicial Standard.” *Columbia Law Review*, 91(7), 1991, 1757–1792, at 1760; Taylor–Sherman, C., “A Unified Approach to Predatory Pricing Analysis Under the Sherman and Robinson–Patman Acts.” *Minnesota Law Review*, 76, 1992, 1283–1312, at 1285–1286. One recent case which rejected this unified approach is *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.* (881 F.2d 1396 (7th Cir. 1989)). The Supreme Court approved a unified approach in *Brooke Group* (see text accompanying notes 96–98, *infra*).

²⁴ *Utah Pie Co. v. Continental Baking Co.* 386 U.S. 685 (1967).

²⁵ *Ibid.*, at 698.

²⁶ Hurwitz, J.D. & Kovacic, W.E., “Judicial Analysis of Predation: The Emerging Trends.” *Vanderbilt Law Review*, 35, 1982, 63–157, at 89.

²⁷ *Ibid.*, at 90. In *Utah Pie* the Supreme Court stated that “a jury would be free to ascertain a seller’s intent from surrounding economic circumstances, which would include persistent unprofitable sales below cost . . .” (*Utah Pie Co. v. Continental Baking Co.*, *supra* note 24, footnote 12 at 696–697.)

²⁸ Vawter, R.R. Jr. & Zuch, S.B., “A Critical Analysis of Recent Federal Appellate Decisions on Predatory Pricing.” *Antitrust Law Journal*, 51, 1983, 401–421, at 401.

²⁹ Brodley, J.F. & Hay, G.A., “Predatory Pricing: Competing Economic Theories and the Evolution of Legal Standards.” *Cornell Law Review*, 66, 1981, 738–803, at 766–767.

Irrespective of whether evidence of “below cost” pricing was used in *Sherman Act* or *Robinson–Patman Act* determinations, no formal theory identified the prerequisites as being proof of either anticompetitive effect or unfairness towards other competitors. As a result, a range of vague, ill–defined tests were employed and a number of decisions were of dubious economic validity.

Areeda and Turner proposed their revolutionary marginal cost rule in 1975 with the objective of substituting “meaningful and workable tests for distinguishing between predatory and competitive pricing”³⁰ for the “empty formulae [such] as ‘below cost’ pricing, ruinous competition, or predatory intent in adjudicating liability”³¹ which had been employed up until that date. Although no circuit courts adopted the test *in toto*, a number of circuit courts, influenced by the underlying logic of the test and the administration and certainty advantages of a bright line rule, quickly embraced the concept of a cost–based test by adopting modified versions of the A–T test.³² However, this judicial enthusiasm soon waned. It became clear that the “new” rule was not as easy to implement as first envisaged. Cost data was infrequently unambiguous or uncontentious, some courts found the complex economic concepts difficult to apply and it was recognised that the new rule strongly favoured defendants. More importantly perhaps, the apparent academic consensus for the test began to disappear.³³ Nevertheless, cost–based tests retained a primary role in judicial considerations of predation.³⁴ Prior to 1986, all United States Court of Appeals employed variants of the A–T rule in deciding whether alleged predatory pricing behaviour existed.³⁵ While intent was disregarded and cost tests were determinative of legality in some circuits, other circuits preferred to be more flexible and used cost tests to establish a presumption of illegality which could then be rebutted by particular factors. The most flexible circuits acknowledged evidence of pricing below a certain cost as simply being one of a

³⁰ Areeda, P. & Turner, D.F., “Predatory Pricing and Related Practices Under Section 2 of the Sherman Act.” *Harvard Law Review*, 88, 1975, 697-733, at 699.

³¹ *Ibid.* (footnotes omitted).

³² Hurwitz & Kovacic, *supra* note 26, at 97; Brodley & Hay, *supra* note 29, at 767-768.

³³ Brodley & Hay, *ibid.*, at 768.

³⁴ See, e.g., Austin, P.I., “Predatory Pricing Law Since *Matsushita*.” *Antitrust Law Journal*, 58, 1990, 895-911, at 904; Brodley & Hay, *ibid.*, at 767-769; Hurwitz & Kovacic, *supra* note 26, at 99-113; Goldstein, *supra* note 23, at 1765.

³⁵ Simkovic, M.S., “Judicial Tests to Determine Predatory Pricing Before and After *Matsushita*.” *University of Miami Law Review*, 44, 1990, 839-876, at 844.

number of factors, including evidence of subjective intent, barriers to entry and market shares, which would influence the court's decision.

Prior to deliberating on the *Brooke Group*³⁶ case, the Supreme Court had the opportunity to discuss the merits of alternative cost-based tests in two cases, *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*³⁷ and *Cargill, Inc. v. Monfort of Colorado, Inc.*³⁸ Although these cases are more notable for the general scepticism which pervaded the court's analyses and their role in creating a test of recoupment,³⁹ in both cases the court implicitly acknowledged the relevance of cost-based standards by defining predation as "pricing below some appropriate measure of cost."⁴⁰ However, the court declined to identify which measure of cost was relevant, and expressly left open the issue of whether above-cost pricing alone, or coupled with evidence of predatory intent, could ever be considered proof of predatory pricing.⁴¹ Nevertheless, in spite of the large volume of academic criticisms levelled at the A-T test and cost-based tests in general, the unanimous recognition of such tests by the United States courts—which continues to the present day—is testament to the high degree of importance ascribed by the judiciary to these tests and their profound influence on predation cases.⁴²

The Supreme Court *Matsushita* and *Cargill* decisions established 1986 as a watershed year for judicial predatory pricing determinations. In their first predatory pricing case since *Utah Pie*, the court in *Matsushita* embraced the irrationality arguments of McGee, Bork and Easterbrook⁴³ and adopted a sceptical attitude towards the plausibility of predation. Citing the arguments of these three commentators with approval, the court concluded that "there is a consensus among commentators that predatory pricing schemes are rarely tried, and even more rarely successful."⁴⁴ The

³⁶ *Brooke Group, Ltd. v. Brown & Williamson Tobacco Corp.*, *supra* note 1.

³⁷ *Matsushita Electric Industrial Co. v. Zenith Radio Corp.* 475 U.S. 574 (1986).

³⁸ *Cargill, Inc. v. Monfort of Colorado, Inc.* 479 U.S. 104 (1986).

³⁹ See text accompanying notes 43–49, *infra*.

⁴⁰ *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, *supra* note 37, footnote 8 at 584; *Cargill, Inc. v. Monfort of Colorado, Inc.*, *supra* note 38, footnote 12 at 117.

⁴¹ *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, *ibid.*, footnote 8-9 at 584-585; *Cargill, Inc. v. Monfort of Colorado, Inc.*, *ibid.*

⁴² For more comprehensive discussions of the influence of the A-T test upon the United States courts prior to 1986 see, e.g., Hurwitz & Kovacic, *supra* note 26; Simkovic, *supra* note 35.

⁴³ See, generally, part II, chapter B, section 2, *supra*.

⁴⁴ *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, *supra* note 37, at 589. This statement was cited with approval by the court in *Cargill*. (*Cargill, Inc. v. Monfort of Colorado, Inc.*, *supra* note 38, footnote 17 at 121.)

court then sowed the seeds of what has become known as the “recoupment test” by stating that “it is not enough simply to achieve monopoly power . . . 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.”⁴⁵ Therefore, predatory pricing would not be rational unless the market conditions were conducive to recoupment, and following the court’s *ratio decidendi*, unless the alleged predator has a rational economic motive to predate then such allegations should be dismissed. This *de facto* rationality test was reiterated in *Cargill* where the court stated that “[c]ourts should not find allegations of predatory pricing credible when the alleged predator is incapable of successfully pursuing a predatory scheme.”⁴⁶ The plausibility or rationality test proposed by the court was vague in the sense that no framework for such an analysis was suggested nor was it stipulated what factors are critical in the analysis. Nevertheless, some commentators claimed that the precedent established by *Matsushita* would appear “to provide a broad basis for lower courts virtually to write predatory pricing out of the law.”⁴⁷ Such a result did not transpire⁴⁸ but the pronouncements by the court regarding predation did provide the authority for the early dismissal of predation allegations by those circuit courts which already viewed such conduct with scepticism.⁴⁹

Despite the Supreme Court’s obvious scepticism and the apparent rationality standard which it advocated in *Matsushita* and *Cargill*, not all lower courts followed these precedents.⁵⁰ *Matsushita* was tried in the Supreme Court under §1 of the *Sherman Act* which declares illegal contracts, combinations, or conspiracies “in restraint of trade or commerce”⁵¹, and *Cargill* involved §7 of the *Clayton Act* which prohibits mergers when their effect “may be substantially to lessen competition, or to tend to create a monopoly.”⁵² Since most allegations of predation are brought under either §2 of the

⁴⁵ *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, *ibid.*, at 589 (emphasis in original).

⁴⁶ *Ibid.*, footnote 15 at 119.

⁴⁷ Calvani, T. & Sibarium, M.L., “Antitrust Today: Maturity or Decline.” *Antitrust Bulletin*, 35(1), 1990, 123-217, at 141.

⁴⁸ See Austin, *supra* note 34, at 895; Simkovic, *supra* note 35, at 862-863.

⁴⁹ Simkovic, *ibid.*

⁵⁰ For a relatively recent review of tests employed by the different circuit courts in the post-*Matsushita* era see Simkovic, *ibid.*, at 862-874.

⁵¹ 15 U.S.C. §1 (1988).

⁵² 15 U.S.C. §18 (1988).

Sherman Act or the *Robinson–Patman Act*, those circuit courts which had been more receptive to allegations of predation prior to 1986, managed to retain the right to continue to use their favoured tests by distinguishing *Matsushita* and *Cargill* on the basis of their facts. However, as noted, the circuits which had always viewed predation with some scepticism, continued to adopt this view and used the Supreme Court’s pronouncements as justification for their stance. In particular, in *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*⁵³ the Seventh Circuit relied upon the *Matsushita* and *Cargill* decisions to provide it with the mandate to formally define what is now generally referred to as the recoupment test.⁵⁴ Significantly, Judge Easterbrook was one of the judges presiding over the case, and he delivered the opinion of the court.

Easterbrook began his judgment by noting that three methods—cost tests, intent, and recoupment—could be used to identify predation. The problems involved in conducting cost-based determinations were briefly described and it was concluded that such investigations were inherently “difficult business.”⁵⁵ After acknowledging that “intent *in principle* could help disambiguate bits of economic evidence in rare cases”⁵⁶, determinations based upon intent were entirely rejected on the grounds that “the cost (in money and error) of searching for these rare cases is too high.”⁵⁷ The recoupment test—which essentially equates to the first stage inquiry of the J–K rule⁵⁸—was then introduced:⁵⁹

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.

Thus, for predation to exist it is necessary that the *ex post* market structure be conducive to supracompetitive pricing by the predator for a sufficient period which enabled the cost of the alleged predatory campaign to be recouped. However, this condition is not

⁵³ *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, *supra* note 23.

⁵⁴ In arguing that the recoupment test was supported by contemporary United States cases, Easterbrook stated that “[t]he two most recent predatory pricing cases in the Supreme Court . . . employ it, each holding that recoupment would be so unlikely that antitrust inquiry could not be justified.” (*Ibid.*, at 1401.) Although many commentators have commended the use of a structural filter, some have criticised aspects of the *Rose Acre* decision including Easterbrook’s claim that *Matsushita* and *Cargill* decisions support the recoupment test (see, e.g., Goldstein, *supra* note 23, at 1770-1772).

⁵⁵ *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, *supra* note 23, at 1400.

⁵⁶ *Ibid.*, at 1402 (emphasis in original).

⁵⁷ *Ibid.*

⁵⁸ The Joskow–Klevorick rule is briefly presented in part II, chapter C, section 4, subsection (b), *supra*.

⁵⁹ *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, *supra* note 23, at 1401.

sufficient. Only after allegations pass this filter “need a court inquire into the relation between price and cost.”⁶⁰ Application of the recoupment test will not condemn attempted predation which will be unprofitable. Easterbrook justifies this result by stating:⁶¹

[I]f 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 the cost today, followed by the competitive tomorrow, bestows a gift upon consumers. Because antitrust laws are designed for the benefit of consumers, not competitors, . . . a gift of this kind is not actionable.

This argument is then used by Easterbrook as a further justification for rejecting intent as a method of inferring anticompetitive effect. He states that “unless recoupment lies in store even the most vicious intent is harmless to the competitive system.”⁶²

Unsurprisingly, the assumptions which underlie Easterbrook’s rationale for the recoupment test and the complete rejection of intent as either definitive or supplementary evidence of predation are firmly grounded in the Chicago School. By deliberately eliminating allegations of predation where there exists no possibility of recoupment, Easterbrook implicitly rejects the notion that attempted predation should be proscribed because it would conflict with non-economic goals of antitrust. Furthermore, because Easterbrook extrajudicially expressed a preference for eliminating allegations of predation entirely,⁶³ the recoupment test may reflect the most practicable method of achieving this result without being seen to conflict with the statements of the Supreme Court in *Cargill* where a rule making all pricing *per se* legal was emphatically rejected.⁶⁴ Such a contention is also supported by the extremely restricted list of factors which Chicago School adherents recognise as barriers to entry.⁶⁵ Adopting such a view in conjunction with the recoupment test would ensure that the vast majority of predation

⁶⁰ Ibid.

⁶¹ Ibid. (citations omitted).

⁶² Ibid. McGee has makes an equivalent argument when he states the “the intent of the price cutter and the mental state of his rivals are difficult to establish and ambiguous. They are also largely irrelevant; it is effects that matter.” (McGee, *supra* note 6, at 292.)

⁶³ See Easterbrook, *supra* note 6, at 336-337. Easterbrook was appointed as a Circuit Court judge in 1985 under the Reagan administration.

⁶⁴ *Cargill, Inc. v. Monfort of Colorado, Inc.*, *supra* note 38, at 121-122.

⁶⁵ The Chicago School define barriers to entry as costs which must be incurred by new entrants which did not have to be incurred by extant firms (see Schmidt, I.L.O. & Rittaler, J.B., *A Critical Evaluation of the Chicago School of Antitrust Analysis*. Netherlands: Kluwer Academic Publishers, 1989, at 74-80) or alternatively, barriers which arise not because of superior efficiency (Bork, *supra* note 6, at 310-329). Therefore vertical integration, advertising, scale economies and, importantly, reputation and capital requirements would not be considered barriers to entry.

allegations are rejected. Whether such an effect will occur is dependent upon the acceptance of the test outside of the Seventh Circuit, and in particular, what precedent is set by the Supreme Court in *Brooke Group*.

The 1986 cases of *Matsushita* and *Cargill* presented the Supreme Court with two opportunities to provide guidance and certainty to lower courts in predatory pricing cases. Since 1975, these courts had been grappling with the complexities of determining the existence of predatory pricing and a diverse set of standards had evolved. To ensure consistent adjudication between the various district and circuit courts, numerous questions need answers, including: What is the role of subjective intent? What cost standard should be employed? Are cost-based tests determinative? If cost standards establish presumptions of legality, what evidence can rebut these presumptions? Can prices above cost ever be predatory? The opportunity was passed up. Instead, the Supreme Court added to the confused environment by deciding both cases on the basis of structural market factors and, at the same time, refusing to provide definitive answers to any of the preceding questions. Furthermore, they neglected to explicitly state whether the new structural test was indeed a standard for illegality and where this new test was situated with respect to evidence of below-cost pricing and subjective predatory intent.

The *Brooke Group* case represents the most recent opportunity for the Supreme Court to again visit and answer these issues and questions which have retained their relevance during the intervening seven years. Whether this opportunity was accepted will be discussed in the remainder of this section.

(b) Facts of the Case

The United States cigarette market had historically been one of America's most concentrated and profitable industries.⁶⁶ It was supplied by a six-firm oligopoly which had not faced a single significant new entrant in the entire post-World War II period

⁶⁶ *Brooke Group*, *supra* note 1, at 70,379 (citing Scherer, F.M. & Ross, D., *Industrial Market Structure and Economic Performance* (3rd ed.). Boston: Houghton Mifflin, 1990, at 250).

despite constant growth in market demand up until 1980.⁶⁷ Prior to 1980, infra-industry competition was engaged in through non-price means such as advertising, packaging, consumer promotions and the introduction of new brands.⁶⁸ List prices were generally equivalent across brands and had “increased in lock-step, twice a year, for a number of years, irrespective of the rate of inflation, changes in the costs of production, or shifts in consumer demand.”⁶⁹ As the court stated, “[s]ubstantial evidence suggests that in recent decades, the industry reaped the benefits of prices above a competitive level.”⁷⁰ In 1980, demand began to decline in the face of an increasing consumer awareness of the health risks of smoking and rises in federal excise taxes.⁷¹ In conjunction with the relative difficulty in redeploying the durable cigarette plants to other industries, this decline in demand resulted in substantial excess productive capacity for all firms.⁷² Although industry profitability was not compromised by these events,⁷³ some individual producers began to experience difficulties as a result of a declining market share. In particular, the appellant, Liggett & Myers Ltd.,⁷⁴ saw its market share drop from a high of over 20% to just over 2% in 1980.⁷⁵

In response to this crisis,⁷⁶ in 1980 Liggett introduced a generic “black and white” cigarette into the economy (or generic) segment of the market which sold at approximately 30% below the list price of branded cigarettes.⁷⁷ To encourage sales, Liggett implemented a marketing scheme whereby selected wholesale customers would receive rebates, the size of which was a positive function of the volume ordered.⁷⁸ The new product was a success. By 1984, Liggett’s generic cigarettes accounted for 97% of

⁶⁷ Glazer, K.L., “Predatory Pricing and Beyond: Life After *Brooke Group*,” *Antitrust Law Journal*, 62, 1994, 605-633, at 608.

⁶⁸ Elzinga, K.G. & Mills, D.E., “Trumping the Areeda-Turner Test: The Recoupment Standard in *Brooke Group*,” *Antitrust Law Journal*, 62, 1994, 559-584, at 566.

⁶⁹ *Brooke Group*, *supra* note 1, at 70,379.

⁷⁰ *Ibid.*

⁷¹ *Ibid.*, at 70,391.

⁷² Elzinga & Mills, *supra* note 68.

⁷³ Between 1980 and 1988, “profits per thousand [cigarettes sold] rose from \$3.80 to \$11.55” for the industry (Glazer, *supra* note 67). Glazer did not disclose whether these profits were net or gross.

⁷⁴ The original plaintiff was Liggett & Myers, Ltd. However, during the course of the trial, Liggett was renamed Brooke Group, Ltd. As the Supreme Court referred to the appellant by their original name, this practice will be followed in this thesis. The shorthand reference for the case will be “*Brooke Group*”.

⁷⁵ *Brooke Group*, *supra* note 1, at 70,379.

⁷⁶ The court noted that at this time, “Liggett was on the verge of going out of business.” (*Ibid.*)

⁷⁷ The “economy” or “generic” segment of the market is characterised by “black and white” (so-called because of its white packaging with black lettering), “private label generics” (which displayed the name of a specific purchaser such as a retail chain), “branded generics” (deeply discounted branded cigarettes) and “Value-25’s” (packs of 25 cigarettes sold for the price of 20) cigarettes. These products essentially compete on the basis of price and are the subject of minimal advertising.

⁷⁸ *Brooke Group*, *supra* note 1, at 70,379.

all generic sales and 4% of the total cigarette market.⁷⁹ This success was predominantly at the expense of the brands of the defendant, Brown & Williamson (hereafter referred to as “B&W”). Although the total market share of B&W was only 11.4% in 1980, the relatively high price sensitivity of its customers resulted in 20% of the consumers of Liggett’s generic cigarettes being previous B&W customers.⁸⁰

The first response to Liggett’s success in the generic market came from R.J. Reynolds, the second largest company in the industry, who introduced a 25-pack brand in 1983.⁸¹ This strategy was followed by B&W who introduced their own 25-pack brand later the same year.⁸² Then, in 1984, R.J. Reynolds repositioned its flagging “Doral” brand as a branded generic and sold it at comparable list prices and rebate discounts to Liggett’s black and whites.⁸³ Later the same year, B&W decided to compete directly with Liggett in the generic market by introducing their own black and white brand which was to be sold at the same list price as Liggett’s but with “[s]uperior discounts/allowances.”⁸⁴ B&W’s internal memoranda estimated that this brand would generate a “trading profit” of \$5.1 million in the latter half of 1984 and \$43.6 million in 1985.⁸⁵ It was expected that Liggett would respond to B&W’s discounting in kind, and in this event, B&W’s documents indicated that it was “prepared to redistribute this entire amount [of the estimated trading profit] in the form of additional trade allowances.”⁸⁶ As the Dissent noted, the memoranda also stated that:⁸⁷

[The strategy] was designed to ‘provide B&W more influence to manage up the prices of branded generics to improve profitability’ . . . and also the opportunity to participate in the economy market, with a view toward ‘manag(ing) down generic volume.’ Notwithstanding its ultimate aim to ‘limit generic segment growth,’ B&W estimated an aggregate potential trading profit on black and whites of \$342 million for 1984 to 1988. Though B&W recognised that it might be required to use ‘some or all of this potential trading profit’ to maintain its market position, it also believed that it would recoup its losses as the segment became ‘more profitable, particularly as it approaches maturity.’

⁷⁹ A new product was generally considered a success if it captured 1% of the total market (Elzinga & Mills, *supra* note 68, footnote 32 at 567).

⁸⁰ *Brooke Group*, *supra* note 1, at 70,379.

⁸¹ *Ibid.*, at 70,380.

⁸² *Ibid.*

⁸³ *Ibid.*

⁸⁴ *Ibid.*, at 70,392.

⁸⁵ *Ibid.*

⁸⁶ *Ibid.*

⁸⁷ *Ibid.*, (references omitted).

B&W targeted both its existing distributors (including a thousand wholesalers who had not yet carried any generic products) and Liggett's 14 largest customers.⁸⁸ The importance of rebates between the two competing black and white brands was magnified by the fact that wholesalers generally perceived the products as substitutable and would therefore only carry one brand.⁸⁹ The combination of this perception, B&W's aggressive rebates and the fact that nearly all of Liggett's sales were derived from the generic segment of the market meant that Liggett could not afford to ignore the threat posed by B&W.

Liggett's immediate reaction to B&W's announcement that they would begin supplying a black and white brand was to increase its wholesale rebates. As the court noted:⁹⁰

This precipitated a price war at the wholesale level, in which Liggett five times attempted to beat the rebates offered by Brown & Williamson. At the end of each round, Brown & Williamson maintained a real advantage over Liggett's prices. Although it is undisputed that Liggett's original net price for its black and whites was above its costs, Liggett contends that by the end of the rebate war Brown & Williamson was selling at a loss. This rebate war occurred before Brown & Williamson has sold a single black and white cigarette.

In 1985, Liggett instituted action under §2(a) of the *Robinson-Patman Act* alleging that B&W's rebate pricing scheme amounted to primary line price discrimination that had a reasonable possibility of injuring competition. Liggett contended that the discriminatory rebates were part of a broader predatory pricing strategy conducted with the ultimate objective of retaining B&W's supracompetitive profits in the branded cigarette segment of the market. This result, Liggett claimed, was to be achieved by B&W pricing below cost in the generic market in order to pressure Liggett to raise its retail prices on its generic cigarettes and thereby reduce the price differential between the generic and branded segments of the market. Allegedly, B&W

⁸⁸ *Ibid.* The Dissent noted that by targeting Liggett's 14 largest wholesale customers, Brown & Williamson "not only put its money where the volume is, . . . but also applied maximum pressure to Liggett at a lesser cost to itself than would have resulted from a nondiscriminatory price cut." (*Ibid.*, footnote 10 at 70,392.) Elzinga & Mills claim that this argument is "confused economics." (Elzinga & Mills, *supra* note 68, footnote 33 at 567.) They correctly observe that (*ibid.*):

A firm that is discriminating in its below-cost pricing imposes no larger costs upon rivals than a firm selling at a uniform below-cost price. If Brown & Williamson sells to account 1 at a lower below-cost price than it sells to account 2, Liggett can focus its attention on the latter account, reducing its losses and increasing Brown & Williamson's.

⁸⁹ *Brooke Group*, *supra* note 1, at 70,380.

⁹⁰ *Ibid.*

used wholesale rebates to engage in the below-cost pricing because of their belief that wholesalers would not pass these savings on to consumers. B&W would therefore capture market share from Liggett whilst ensuring that consumer demand for generics would not increase as a result of any price decrease. Reducing the price differential would restrain the rate of consumers converting from branded to generic cigarettes and thus preserve B&W's supracompetitive profits on its branded cigarettes.

The prices of generic cigarettes stabilised at the levels existing at the end of the rebate war for one year. Then, in June 1985, Liggett increased its list price of its generic cigarettes followed soon after by all other firms. As the court noted:⁹¹

The precise effect of the list price increase is difficult to assess, because all of the cigarette firms offered a variety of discounts, coupons, and other promotions directly to consumers on both generic and branded cigarettes. Nonetheless, *at least some portion of the list price increase was reflected in a higher net price to the consumer.*

These prices remained stable until mid-1986 when the generic list prices began a pattern of twice yearly price increases in tandem with the branded cigarettes. Both products increased by identical dollar amounts with the result that the percentage price differential between the products narrowed. In the five years following B&W's entry into the generic market in 1984, the percentage differential dropped over a quarter from 38% to 27%.⁹² The case went to trial in 1989, by which time, five manufacturers, including Liggett, had introduced so-called "subgenerics" which sold at approximately 50% below the list price of branded cigarettes. The impact of these subgenerics was not substantial—probably to the point of being insignificant⁹³—because from mid-1984 until 1989, the list price of *all* cigarettes weighted according to volume had increased 61% despite falling demand, inflation of 20% and constant costs.⁹⁴

After a 115-day trial, the jury found that B&W had engaged in primary price discrimination that had a reasonable possibility of injuring competition in the national cigarette market in contravention of §2(a) of the *Robinson-Patman Act*. Liggett was awarded \$148.8 million in damages after tripling. The District Court overturned this

⁹¹ *Ibid.*, at 70,381 (emphasis added).

⁹² *Ibid.*

⁹³ See note 178, *infra*.

⁹⁴ Glazer, *supra* note 67, at 617-618.

verdict on the basis that competition could not be injured unless there had been tacit coordination in the economy segment of the market and that a reasonable jury could not have concluded that such coordination existed. The Court of Appeals for the Fourth Circuit upheld the District Court's decision. In their opinion, "[t]o rely on the characteristics of an oligopoly to assure recoupment of losses from a predatory pricing scheme after one oligopolist has made a competitive move is . . . economically irrational."⁹⁵

(c) Decision of the Supreme Court

The Majority began their judgment by identifying the differences and similarities between §2 of the *Sherman Act* and the *Robinson–Patman Act* with respect to allegations of predatory pricing. In particular, they stated that the attempt offence in §2 of the *Sherman Act* "condemn[s] predatory pricing when it poses 'a dangerous probability of actual monopolisation'"⁹⁶ whilst "the Robinson–Patman Act requires only that there be 'a reasonable possibility' of substantial injury to competition."⁹⁷ Despite this difference, however, the court stipulated that "the essence of the claim under either statute is the same."⁹⁸

Two prerequisites for liability for predatory pricing under either act were identified by the court:

1. The prices complained must be shown by the plaintiff to be "below an appropriate measure of its rival's costs"⁹⁹; and,
2. "[A] demonstration that the competitor had a reasonable prospect, or, under §2 of the Sherman Act, a dangerous probability, of recouping its investment in below-cost prices."¹⁰⁰ To prove recoupment, the plaintiff must show:
 - a) that the below-cost pricing is "capable, as a threshold matter, of producing the intended effects on the firm's rivals . . ." ¹⁰¹; and,

⁹⁵ *Brooke Group*, *supra* note 1, at 70,381.

⁹⁶ *Ibid.*, at 70,382 (citing *Spectrum Sports, Inc. v. McQuillan* [1993-1 Trade Cases ¶70,096]).

⁹⁷ *Ibid.*, (citing *Falls City Industries, Inc. v. Vanco Beverage, Inc.*, *supra* note 22).

⁹⁸ *Ibid.*

⁹⁹ *Ibid.*, at 70,382.

¹⁰⁰ *Ibid.*, at 70,383.

¹⁰¹ *Ibid.*

- b) “there is a likelihood that the predatory scheme alleged would cause a rise in prices above a competitive level that would be sufficient to compensate for the amounts expended on the predation, including the time value of money invested in it.”¹⁰²

With regard to the first prerequisite, the court, citing *Matsushita* and *Cargill*, stated:¹⁰³

[T]he reasoning in both opinions suggests that only below-cost prices should suffice, and we have rejected elsewhere the notion that above-cost prices that are below general market levels or the costs of a firm’s competitors inflict injury to competition cognizable under the antitrust laws. . . . As a general rule, the exclusionary effect of prices above a relevant measure of cost either reflects the lower cost structure of the alleged predator, and so represents competition on the merits, or is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate price-cutting.

The second prerequisite elaborates upon and formally establishes a recoupment standard which had previously only been implied by the court in its *Matsushita* and *Cargill* decisions. In discussing the second prerequisite, the court indicated its preference for disregarding any welfare loss arising from below-cost pricing. It stated that:¹⁰⁴

Recoupment is the ultimate object of an unlawful predatory pricing scheme; it is the means by which a predator profits from predation. Without it, predatory pricing produces lower aggregate prices in the market, and consumer welfare is enhanced. Although unsuccessful predatory pricing may encourage some inefficient substitution toward the product being sold at less than its cost, unsuccessful predation is in general a boon to consumers.

Whether the threshold in part (a) of the recoupment test is satisfied is dependant upon “the extent and duration of the alleged predation, the relative financial strength of the predator and its intended victim, and their respective incentives and will.”¹⁰⁵ With regard to part (b), the court stated that “[i]f the market circumstances or deficiencies in proof would bar a reasonable jury from finding that the scheme alleged would likely result in sustained supracompetitive pricing, the plaintiff’s case has failed.”¹⁰⁶ Such damning market circumstances would include “where the market is highly diffuse and competitive, or where new entry is easy, or the defendant lacks adequate excess capacity

¹⁰² Ibid., at 70,384.

¹⁰³ Ibid., at 70,383.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid., at 70,384.

¹⁰⁶ Ibid.

to absorb the market shares of his rivals and cannot quickly create or purchase new capacity.”¹⁰⁷

Recognising that Liggett’s allegation relied upon tacit price collusion between all the cigarette companies, the court then discussed the inherent difficulties involved with predation schemes requiring collusion. The court referred to and affirmed its statements in *Matsushita* regarding the general implausibility of predatory pricing schemes in general and those requiring the existence of collusion for success in particular. The court then noted that “[h]owever unlikely predatory pricing by multiple firms may be when they conspire, it is even less likely when, as here, there is no express coordination.”¹⁰⁸ It was observed that in order for a predatory pricing scheme requiring tacit collusion to succeed, the oligopolists must “rely on uncertain and ambiguous signals to achieve concerted action. The signals are subject to misinterpretation and are a blunt and imprecise means of ensuring smooth cooperation . . .”¹⁰⁹ While the court noted that recoupment via oligopolistic price coordination could be considered more feasible than in a monopoly situation because “the victim itself has an incentive to acquiesce in the scheme,”¹¹⁰ the court concluded that “on the whole, tacit cooperation among oligopolists must be considered the least likely means of recouping predatory losses.”¹¹¹ Furthermore, it was noted that where predation is performed within an oligopoly, the predator faces an disproportionate amount of risk since it alone must incur all its losses, yet “the later supracompetitive profits must be shared with every other oligopolist in proportion to its market share, including the intended victim.”¹¹² In the present case, B&W’s 12% market share implied that it “would have to generate around \$9 in supracompetitive profits for each \$1 invested in predation; the remaining \$8 would belong to its competitors, who had taken no risk.”¹¹³

Despite the inherent implausibility of predatory pricing schemes which require concerted behaviour for success, the court expressly refused to hold that such schemes

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid., at 70,385.

¹¹¹ Ibid.

¹¹² Ibid.

¹¹³ Ibid. For a discussion on the validity of these statistics see text accompanying notes 187-189, *infra*.

could never be successful. Such an opinion was arguably expressed in the Court of Appeal where it was held that oligopoly pricing does not “provide an economically rational basis”¹¹⁴ for the recoupment of predatory losses. In disagreeing with this stance, the court concluded that “[h]owever unlikely . . . [predation requiring oligopolistic pricing] may be as a general matter, when the realities of the market and the record facts indicate that it has occurred and was likely to have succeeded, theory will not stand in the way of liability.”¹¹⁵

Having identified the relevant prerequisites to a finding of liability for predatory pricing under the *Robinson–Patman Act*, the court evaluated the facts to determine whether these necessary factors could reasonably be said to exist. The court expressed the essence of Liggett’s case as follows:¹¹⁶

Brown & Williamson would enter the generic segment with list prices matching Liggett’s but with massive, discriminatory volume rebates directed at Liggett’s biggest wholesalers; as a result, the net price of Brown & Williamson’s generics would be below costs; Liggett would suffer losses trying to defend its market share and wholesale customer base by matching Brown & Williamson’s rebates; to avoid further losses, Liggett would raise its list prices on generics or acquiesce in price leadership by Brown & Williamson; higher list prices to consumers would shrink the percentage gap in retail price between generic and branded cigarettes; and this narrowing of the gap would make generics less appealing to the consumer, thus slowing the growth of the economy segment and reducing cannibalization of branded sales and their associated supracompetitive profits.

Although intent is not relevant within the two-tier test advocated by the court,¹¹⁷ it was acknowledged that a “reasonable jury could conclude [from the evidence on record] that Brown & Williamson envisioned or intended this anticompetitive course of events.”¹¹⁸ Brown & Williamson documents not only contained aggressively phrased statements referring to Liggett—for example, “speed up Liggett’s demise”¹¹⁹ and “put a lid on Liggett”¹²⁰—but also detailed a pricing strategy corresponding to that alleged by Liggett. In commenting on this evidence, the District Court noted that:¹²¹

¹¹⁴ *Ibid.*, at 70,385 (citing *Liggett Group, Inc. v. Brown & Williamson Tobacco Corp.* 1992-1 Trade Cases ¶69,817, at 67,810).

¹¹⁵ *Ibid.*

¹¹⁶ *Ibid.*, at 70,386.

¹¹⁷ For a discussion of the court’s rejection of evidence of B&W’s anticompetitive intent, see text accompanying notes 200-210, *infra*.

¹¹⁸ *Brooke Group*, *supra* note 1, at 70,386.

¹¹⁹ Glazer, *supra* note 67, at 610.

¹²⁰ *Ibid.*

¹²¹ *Ibid.*, at 610-611.

These documents, indicating B&W's anticompetitive intent, are more voluminous and detailed than any other reported case. This evidence not only indicates B&W wanted to injure Liggett, it also details an extensive plan to slow growth of the generic cigarette segment.

The court found sufficient evidence of the first prerequisite—pricing below an appropriate measure of costs—to allow “a reasonable jury to conclude that for a period of approximately 18 months, Brown & Williamson's prices on its generic cigarettes were below its costs . . . and that this below-cost pricing imposed losses on Liggett that Liggett was unwilling to sustain, given its corporate parent's effort to locate a buyer for the company.”¹²² Such a conclusion was essentially assured since B&W's own economic expert conceded that B&W had priced below AVC during 1984 and 1985.¹²³

Given the consensus on the first prerequisite, the case revolved around the requirement for recoupment. With regards to proving this factor, the court noted that “the linchpin of the predatory scheme alleged by Liggett is Brown & Williamson's ability, with the other oligopolists, to raise prices above a competitive level in the *generic* segment of the market.”¹²⁴ According to the court, such sustained oligopolistic supracompetitive pricing could be proven if either (i) the evidence supported a conclusion that such prices actually occurred, or (ii) the evidence regarding the market structure and B&W's conduct supported the conclusion that the scheme was likely to have resulted in supracompetitive pricing in the generic segment of the market.¹²⁵

The court concluded that the evidence did not support the existence of actual supracompetitive pricing in the generic segment. It noted that such pricing generally involves a restriction in output, yet after the period of B&W's alleged predation, output expanded. Given this fact, the court observed that “output in the generic segment can only have been restricted in the sense that it expanded at a slower rate than it would have absent Brown & Williamson's intervention.”¹²⁶ However, the court again found that the evidence could not support such a conclusion. The average annual rate of growth in the generic segment from 1980 to 1984 was 1%, whereas in the five years

¹²² *Brooke Group*, *supra* note 1, at 70,386.

¹²³ *Glazer*, *supra* note 67, at 614.

¹²⁴ *Brooke Group*, *supra* note 1, at 70,386 (emphasis added).

¹²⁵ *Ibid.*

¹²⁶ *Ibid.*, at 70,387.

following B&W's entry the average growth rate increased to more than 2% per annum. Noting that such statistics are not definitive, the court examined the evidence for any proof that the average rate of growth for the generic segment following B&W's entry would have been greater than 2% per annum. Such proof was not forthcoming. The only relevant evidence were segment projections by B&W which estimated that in the absence of B&W's entry, the segment would account for 10% of the market by 1988. However, in 1988, after B&W's allegedly anticompetitive campaign, the generic segment actually accounted for over 12% of the market.¹²⁷ The fact that the actual proportion of the market represented by generics was greater than the projected figure, led the court to reject the claim that the segment would have grown faster in the absence of B&W's entry.

In contrast to the preceding court's approach which used quantity to evaluate whether the facts supported a finding of supracompetitive pricing, Liggett's analysis was conducted on the actual price structure of the market before and after the alleged predatory pricing period.¹²⁸ As already noted, after an initial rise in generic cigarettes in late-1985, the prices on all cigarettes rose bi-annually by an equal amount from mid-1986 with a resultant decrease in the price differential between branded and generic cigarettes. Furthermore, these price increases exceeded increases in costs, taxes and promotional expenditure over the same period. Based on this evidence, Liggett argued,¹²⁹

[T]hat this would permit a reasonable jury to find that Brown & Williamson succeeded in bringing about oligopolistic price coordination and supracompetitive prices in the generic category sufficient to slow its growth, thereby preserving supracompetitive branded profits and recouping its predatory losses.

The court rejected this argument for a number of reasons. First, it stated that Liggett had erroneously based its claim on increases in the list prices of generic cigarettes. It observed that "cigarette companies invested substantial sums in promotional schemes . . . that reduced the actual cost of cigarettes to consumers below

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Ibid.

list prices”¹³⁰ and that “[m]any wholesalers also passed portions of their volume rebates on to the consumer, which had the effect of further undermining the significance of the retail list prices.”¹³¹ The court reasoned that the combination of these factors resulted in consumers paying less than the list price. Second, the court noted that Liggett failed to acknowledge the impact of subgenerics.¹³² The court stated that the introduction of this product in 1988 caused the price differential between branded cigarettes and the lowest priced product to *increase* from 38% in 1984 to 52% in 1989.¹³³ Third, whilst it was acknowledged that “a reasonable jury could conclude that the cumulative discounts attributable to subgenerics and the various consumer promotions did not cancel out the full effect of the increases in list prices . . . and that actual prices to the consumer did indeed rise”¹³⁴, it was argued that:¹³⁵

[R]ising prices do not themselves permit an inference of a collusive market dynamic. . . . Where, as here, output is expanding at the same time prices are increasing, rising prices are equally consistent with growing product demand. Under these conditions, a jury may not infer competitive injury from price and output data absent some evidence that tends to prove that output was restricted or prices were above a competitive level.

Finally, the court observed that “Liggett’s own officers and directors consistently denied that they or other firms in the industry priced their cigarettes through tacit collusion or reaped supracompetitive profits.”¹³⁶ In the court’s opinion, this fact created an anomaly “as the very party alleged to have been coerced into pricing through oligopolistic coordination denied that such coordination existed.”¹³⁷

Having concluded that the evidence could not sustain a finding of actual recoupment, the court then considered whether the evidence supported a finding that recoupment was likely at the time B&W entered the generic segment of the market. It was decided that the evidence provided no such support. Firstly, noting that Liggett’s theory relied upon tacit price collusion, the court observed that the existence of a number of structural market factors substantially decreased the likelihood that such

¹³⁰ *Ibid.*, cf. text accompanying notes 164-165 & 174, *infra*.

¹³¹ *Ibid.*, at 70,387-70,388. cf. text accompanying note 175, *infra*.

¹³² *Ibid.*, at 70,388.

¹³³ *Ibid.*

¹³⁴ *Ibid.*

¹³⁵ *Ibid.*

¹³⁶ *Ibid.*

¹³⁷ *Ibid.*

collusion would survive. In particular, “the cigarette industry as a whole faced declining demand and possessed substantial excess capacity . . . [and t]hese circumstances tend to break down patterns of oligopoly pricing and produce price competition.”¹³⁸ Furthermore, “tacit coordination is facilitated by a stable market environment, fungible products, and a small number of variables upon which the firms seeking to coordinate their pricing may focus.”¹³⁹ During the 1980’s, however, the cigarette industry was “in an obvious state of flux”¹⁴⁰ and there existed a large range of products and pricing variables. In particular, the price of each product was a function of the list price, the rebates provided to wholesalers and any direct discounts provided to consumers.¹⁴¹ Under these circumstances, tacit price coordination by the cigarette manufacturers would have required that parallel pricing practices be instituted with respect to each of these variables—many of which are difficult to monitor—without communication.¹⁴² The court concluded that “the inherent limitations of tacit collusion suggest that such multivariable coordination is improbable.”¹⁴³

Another factor which rendered oligopolistic price coordination implausible involved the actions of R.J. Reynolds (“RJR”), who ranked second in the market in terms of market share. The court observed that RJR seemingly acted in opposition to any oligopolistic pricing scheme when it relocated its Doral brand in the generic market and dropped the price by approximately 30%.¹⁴⁴ It was stated that “the natural and probable consequence of its entry into the generic segment was procompetitive”¹⁴⁵ and that the apparent motivation for relocating Doral was to obtain the number one sales position which Philip Morris had captured.¹⁴⁶ Since “[i]t is implausible that without a shared interest in retarding the growth of the economy segment, Brown & Williamson and its fellow oligopolists could have engaged in parallel pricing and raised generic prices above a competitive level”¹⁴⁷, the fact that the second largest manufacturer

¹³⁸ *Ibid.*

¹³⁹ *Ibid.*

¹⁴⁰ *Ibid.*, at 70,389.

¹⁴¹ *Ibid.*

¹⁴² *Ibid.*

¹⁴³ *Ibid.*

¹⁴⁴ *Ibid.*

¹⁴⁵ *Ibid.*

¹⁴⁶ *Ibid.*

¹⁴⁷ *Ibid.*

apparently entered the generic segment in order to expand volume and capture market share contradicted, in the court's opinion, Liggett's "suggestion that the major cigarette companies shared a goal of limiting the growth of the economy segment."¹⁴⁸

The court then observed that the tacit price coordination scheme would require B&W to send a signal to the other oligopolists that its actions in entering the generic segment and engaging in the rebate war with Liggett were not genuinely competitive. Liggett contended that by maintaining its list prices yet offering rebates to wholesalers, B&W was actually signalling that the purpose of its entry was not to attract additional demand to the generic segment.¹⁴⁹ The court rejected this argument. It found that because RJR and Liggett were already using volume rebates, the probability that other manufacturers would perceive an equivalent action by B&W as a signal that it does not intend to act competitively was low.¹⁵⁰ Therefore, "a reasonable jury could not conclude that . . . [B&W's] pricing structure eliminated or rendered insignificant the risk that the other firms might misunderstand Brown & Williamson's entry as a competitive move"¹⁵¹ and "[w]ithout effective signalling, it is difficult to see how the alleged predation could have had a reasonable chance of success through oligopoly pricing."¹⁵²

Finally, the court examined B&W's conduct in marketing its generic cigarettes to determine whether its actions were likely to restrain the growth of the generic segment. In contrast to the alleged effect on generic sales, the court noted a number of actions taken by B&W would be likely to have an expansionary effect on demand in the generic segment including: (i) the sale of generic cigarettes by B&W to one thousand wholesalers who had never carried a generic product who would recruit new retailers to stock B&W's generics; (ii) B&W's unprecedented volume rebates which provided an incentive to wholesalers to increase sales of generic cigarettes because, unlike many branded products, generic products came with no sales guarantees; (iii) many wholesalers passed some portion of the value of the rebates onto the consumer; and (iv)

¹⁴⁸ *Ibid.*

¹⁴⁹ *Ibid.*

¹⁵⁰ *Ibid.*

¹⁵¹ *Ibid.*

¹⁵² *Ibid.*

B&W spent over \$10 million in discount stickers which directly reduced the price paid by consumers for generic cigarettes. In light of these undisputed facts, the court reasoned that it was “not reasonable to conclude that Brown & Williamson threatened in a serious way to restrict output, raise prices above a competitive level, and artificially slow the growth of the economy segment of the national cigarette market.”¹⁵³

On the basis of the preceding facts and logic, the court concluded that:¹⁵⁴

[T]he evidence cannot support a finding that Brown & Williamson’s alleged scheme was likely to result in oligopolistic price coordination and sustained supracompetitive pricing in the generic segment of the national cigarette market. Without this, Brown & Williamson had no reasonable prospect of recouping its predatory losses and could not inflict the injury to competition the antitrust laws prohibit.

(d) The Dissenting Opinion

The dissenting opinion, delivered by Justice Stevens, was highly critical of the Majority’s decision. Although the primary objection was factual, the Dissent adopted a less objective standard of illegality than the Majority’s two-tiered cost and recoupment test. It was the combination of these factors which led the Dissent to hold that “the evidence is plainly sufficient to support”¹⁵⁵ the jury’s finding.

Like the Majority, the Dissent acknowledged that actual harm to competition is not required to be proven under the *Robinson–Patman Act*, and only a reasonable possibility that such harm would result from the conduct at issue need be shown. However, the Dissent rejected the Majority’s implicit requirement that the alleged predatory conduct be proved to be economically rational behaviour. It instead approved the standard adopted in a number of lower courts that evidence of predatory intent coupled with below-cost pricing is sufficient for a finding of illegality. It stated that:¹⁵⁶

When a predator deliberately engages in below-cost pricing targeted at a particular competitor over a sustained period of time, then price-cutting raises a credible inference that harm to competition is likely to ensue.

¹⁵³ *Ibid.*, at 70,390.

¹⁵⁴ *Ibid.*

¹⁵⁵ *Ibid.*, at 70,391.

¹⁵⁶ *Ibid.*, at 70,395.

The Dissent observed that B&W engaged in the price war to discipline Liggett “for its unprecedented use of price competition in an industry that had enjoyed handsome supracompetitive profits for about half a century”¹⁵⁷, and that B&W was “confident enough in the feasibility of their plan that they were willing to invest millions of company dollars in its outcome.”¹⁵⁸ Viewing these facts “against a backdrop of supracompetitive, parallel pricing, in which prices for cigarettes increased in lock-step, twice a year . . . irrespective of the rate of inflation, changes in the cost of production, or shifts in consumer demand”¹⁵⁹, the Dissent concluded that:¹⁶⁰

[I]t is surely fair to infer that B&W’s disciplinary program had a reasonable prospect of persuading Liggett to forego its maverick price reductions and return to parallel pricing policies, and thus to restore the same kind of supracompetitive pricing that had characterized the industry in the past.

Although not explicitly examining issues of recoupment, the Dissent stated that “predatory price-cutting is not unlawful unless the predator has a reasonable prospect of recouping his investment from supracompetitive profits.” Thus, the Dissent apparently considered that evidence of actual or probable recoupment would be a prerequisite for a finding of illegality. If this is the case, however, it remains unclear how such a prerequisite can be reconciled with the Dissent’s previous comment that evidence of predatory intent and sustained below-cost pricing are sufficient to infer anticompetitive harm.

The Dissent objected to the Majority’s decision on the grounds that it “rests on a hodgepodge of legal, factual, and economic propositions that are insufficient, alone or together, to overcome the jury’s assessment of the evidence.”¹⁶¹ In justifying this statement, the Dissent rejected the validity of a number of arguments relied upon by the Majority to arrive at their conclusion that the facts did not support a finding of either actual or likely recoupment. First, the Majority’s reliance on the difference between the generic segment’s expansion rate of 15% and the lower rate of 10% predicted by B&W was viewed as being irrelevant. In the Dissent’s opinion, these statistics fail to address

¹⁵⁷ *Ibid.*, at 70,394.

¹⁵⁸ *Ibid.*

¹⁵⁹ *Ibid.*

¹⁶⁰ *Ibid.*

¹⁶¹ *Ibid.*

the relevant question being whether prices of generic cigarettes during the late 1980s were competitive or anticompetitive. Observing that the list prices on generic and branded cigarettes increased during the late 1980s in “a fashion remarkably similar to the price change patterns that characterized the industry in the 1970s when supracompetitive, oligopolistic pricing admittedly prevailed,”¹⁶² Stevens J. claimed that this fact, coupled with knowledge of the industry’s history of parallel pricing, was sufficient to allow a jury to infer that the increased prices were supracompetitive.¹⁶³

Secondly, to counter the Majority’s argument that the increases in list prices were not determinative of the movement in prices paid by consumers because of the offsetting effect of promotional activities by manufacturers, Stevens J. noted that most of the promotions cited by the Majority actually related to branded cigarettes and would therefore only act to reduce the price differential between branded and generic cigarettes.¹⁶⁴ Stevens J. also observed that the Majority’s speculation regarding the offsetting effect of the promotional activities contradicted its earlier observation that “at least some portion of the list price increase was reflected in a higher net price to the consumer.”¹⁶⁵ Furthermore, Judge Stevens stated that such speculation was not a valid reason for setting aside a jury verdict which had decided—and was entitled to decide—any dispute regarding the effect of promotions on list price increases in the plaintiff’s favour.¹⁶⁶

Finally, the Dissent paid scant regard to the scepticism expressed by the Majority concerning the plausibility of predatory pricing schemes which require tacit price coordination between oligopolists for success. In its opinion, the suggestion that courts hold the ability to predict market behaviour with greater accuracy than market participants themselves was plainly untenable.

¹⁶² *Ibid.*, at 70,395.

¹⁶³ *Ibid.*

¹⁶⁴ *Ibid.*

¹⁶⁵ *Ibid.*

¹⁶⁶ *Ibid.*

(e) Analysis of the Decision

From both a legal and analytical perspective, the Supreme Court's decision in *Brooke Group* is disappointing. Although the court significantly developed the law affecting predatory pricing in the United States, it failed to provide much needed guidance on a number of legal issues which the lower courts have been unable to resolve in a uniform manner. Moreover, of the few legal principles which were espoused by the court, the recoupment standard and the irrelevance of intent may be criticised on the grounds of ambiguity and reason respectively. As a logical analysis of the evidence, the court's judgment is problematical in a number of respects—contradictory statements, the use of inappropriate evidence and, most importantly, a failure to fully comprehend the nature of the allegations are all apparent within the decision. As a result of these deficiencies, doubts must be raised as to the validity of the court's ultimate conclusion. The *Brooke Group* decision will be critiqued on two aspects: first, the implications for predatory pricing law arising from the judgment will be discussed; and second, the court's analysis of the facts and their ultimate findings will be evaluated.

The Logic Underlying the Court's Decision

The court held that a jury could reasonably conclude that B&W deliberately sold their black and white generic cigarettes below cost for approximately 18 months and that Liggett's financial situation precluded it from sustaining the losses forced upon it by B&W's pricing behaviour. The Majority's decision therefore turned on the question of whether recoupment actually occurred or was likely to occur at the time the scheme was implemented. To this end, the court considered that the relevant question was whether "Brown & Williamson . . . was likely to obtain the power to raise the prices for generic cigarettes above a competitive level."¹⁶⁷ In fact, this question does not address Liggett's claim and is one example of a number of statements made by the court which suggest that it has confused the essence of Liggett's claim.

¹⁶⁷ *Ibid.*, at 70,386.

The court consistently states that for Liggett to satisfy the second part of the recoupment standard, it must prove that B&W actually achieved, or was likely to achieve, *supracompetitive* prices in the *generic* segment of the cigarette market.¹⁶⁸ Focusing on the generic segment for recoupment is clearly erroneous.¹⁶⁹ Liggett contended that B&W would recoup its losses by stemming the rate of conversion from branded to generic cigarettes and thereby derive greater *supracompetitive* profits in the branded segment than it would have had the conversion rate not been reduced.¹⁷⁰ Liggett's theory of recoupment did not require prices for generic cigarettes to be increased to *supracompetitive* levels—prices in the generic segment only had to increase until the rate of conversion was slowed by a sufficient degree such that B&W would recoup its losses in the branded segment.¹⁷¹ In order to have evaluated the validity of Liggett's allegations, the court should have determined: (i) whether the branded cigarettes were being sold at *supracompetitive* prices, *and* (ii) whether the conversion rate of consumers from the branded segment to the generic segment slowed as a result of B&W's below-cost pricing. Indeed, it was precisely these points which Liggett endeavoured to prove by focusing on the price structure of the two market segments.¹⁷²

As noted in subsection (b), the court rejected Liggett's claims of actual competitive injury on the grounds that the evidence of list price increases did not take account of the effects of promotions and the possibility that wholesale rebates were passed onto consumers, the impact of subgeneric cigarettes were not acknowledged by Liggett, and finally, and most importantly, "[w]here, as here, output is expanding at the same time prices are increasing, rising prices are equally consistent with growing

¹⁶⁸ The court correctly outlined Liggett's theory (*ibid.*) but then erroneously inferred that the theory involved *supracompetitive* pricing in the generic segment: "Recoupment through *supracompetitive* pricing in the economy segment of the cigarette market is an indispensable part of Liggett's own proffered theory . . ." (*Ibid.*); "[T]he linchpin of the predatory scheme alleged by Liggett is Brown & Williamson's ability . . . to raise prices above a competitive level in the generic segment . . ." (*Ibid.*); "[T]here are two means by which one might infer that Brown & Williamson had a reasonable prospect of producing sustained *supracompetitive* pricing in the generic segment adequate to recoup its predatory losses . . ." (*Ibid.*).

¹⁶⁹ See Calkins, S., "The October 1992 Supreme Court Term and Antitrust: More Objectivity than Ever." *Antitrust Law Journal*, 62, 1994, 327-407, at 390.

¹⁷⁰ See, e.g. Elzinga & Mills, *supra* note 68, at 568.

¹⁷¹ Baker, J.B., "Predatory Pricing After *Brooke Group*: An Economic Perspective." *Antitrust Law Journal*, 62(3), 1994, 585-603, footnote 58, at 597. Conceivably the price of generic cigarettes could be required to increase above the competitive level in order for B&W to recoup its losses. However, whatever the critical price level for generic cigarettes required for recoupment, as the Dissent noted, the evidence "demonstrates that B&W executives were confident enough in the feasibility of their plan that they were willing to invest millions of company dollars in its outcome." (*Brooke Group, supra* note 1, at 70,394.)

¹⁷² See text accompanying notes 128-129, *supra*.

product demand.”¹⁷³ The court’s analysis of Liggett’s evidence is problematical in a number of respects. First, in arguing that the effect of promotions may net out the price increases to consumers, the court directly contradicts its earlier conclusion that in spite of the “variety of discounts, coupons, and other promotions [passed] directly to consumers on both generic and branded cigarettes. . . . *at least some portion of the list price increase was reflected in a higher net price to the consumer.*”¹⁷⁴ The evidence also suggested that the increase in retail promotions was well exceeded by the rise in list prices and that the majority of wholesale rebates were not passed onto consumers.¹⁷⁵ Furthermore, the Dissent noted that the majority of the promotions were attached to branded cigarettes rather than generic cigarettes.¹⁷⁶ Thus, in contrast to the finding of the Majority, the significant promotional expenditure incurred by cigarette manufacturers was directly aiding the alleged predatory strategy by reducing the price differential between branded and generic cigarettes. Second, the significance of the introduction of subgeneric cigarettes is questionable. The court pointed out that the impact of this new product actually increased the price differential between the lowest priced product and branded cigarettes. However, when weighted by volume, list prices for all cigarettes increased by 61% on average¹⁷⁷ and thus the increase in the price differential caused by the subgenerics was ineffective in restricting the average price paid by consumers and the revenues received by the cigarette manufacturers. Moreover, the court failed to note that subgenerics represented less than 1% of the market at the relevant time and therefore, their effect was almost certainly insignificant.¹⁷⁸

Finally, the court’s statement that the combination of expanding output and price increases is “equally consistent with growing product demand”¹⁷⁹ is grounded upon inconsistent logic.¹⁸⁰ The court previously acknowledged that demand was declining in the cigarette market. Therefore, its reference to expanding output implies that it is

¹⁷³ *Brooke Group*, *supra* note 1, at 70,388.

¹⁷⁴ *Ibid.*, at 70,381 (emphasis added). The dissent also noted this contradiction (see text accompanying note 165, *supra*).

¹⁷⁵ Glazer, *supra* note 67, at 618-619.

¹⁷⁶ See text accompanying note 164, *supra*.

¹⁷⁷ See text accompanying note 94, *supra*.

¹⁷⁸ Calkins, *supra* note 169, footnote 330 at 389. The fact that subgenerics represented such a small proportion of the total market implies that they were ineffective in inducing substantial conversions away from branded cigarettes.

¹⁷⁹ *Brooke Group*, *supra* note 1, at 30,388.

¹⁸⁰ See, *ibid.*, at 619-620; Calkins, *supra* note 169, at 389; Baker, *supra* note 171, at 599.

referring to the generic segment of the market. The court also acknowledged that as a result of the declining market demand, manufacturers faced overcapacity. Yet, this being the case, the court cannot claim that the increased (generic) prices were demand related and therefore, a competitive outcome, without enquiring why the cigarette manufacturers, if they were indeed acting competitively, did not switch their excess productive capacity to producing generic cigarettes. No such question was raised by the court despite its conclusion that actual recoupment did not occur because the price increases were competitive.

The validity of the court's conclusion that recoupment was not likely may also be questioned in a number of respects. First, the court partially relied upon events subsequent to B&W's entry into the generic segment to conclude that recoupment was not reasonable prospect at that time.¹⁸¹ As Calkins notes, "[t]his comes close to using hindsight to conclude that recoupment was not likely to succeed."¹⁸² Using *ex post* evidence to conclude that a future outcome is not probable is tortuous logic. To the extent that the court placed any reliance on such evidence for their conclusion, the conclusion must be considered to be of dubious validity. Second, the court contended that the lack of sales guarantees on generic cigarettes coupled with B&W's large rebates placed strong pressure upon wholesalers to sell more generic cigarettes; yet it cited no authority that such pressure actually occurred in the market.¹⁸³ Similarly, although the court relied upon its earlier observation that "many wholesalers passed portions of the rebates . . . on to consumers, thus dropping the retail price of generics and further stimulating demand,"¹⁸⁴ it failed to note the evidence indicating that the portion of rebates passed on to consumers was not significant.¹⁸⁵ Third, the court's statements regarding the changing market characteristics, R.J.R's repositioning of its Doral brand, and the difficulties B&W would have in sending an unambiguous signal to the other

¹⁸¹ Examples of such *ex post* evidence relied upon by the court include: "There is no evidence that R.J. Reynolds accomplished this goal [i.e. to obtain the number one sales position from Philip Morris by entering into the generic market] during the period relevant to this case, or that its commitment to achieving that goal changed. Indeed, R.J. Reynolds refused to follow Brown & Williamson's attempt to raise generic prices in June 1985." (*Brooke Group*, *supra* note 1, at 70,389.); "[D]espite extensive discovery of the corporate records of R.J. Reynolds and Philip Morris, no documents appeared that indicated any awareness of Brown & Williamson's supposed signal by its principal rivals." (*Ibid.*)

¹⁸² Calkins, *supra* note 169, at 400.

¹⁸³ *Ibid.*, footnote 326 at 388.

¹⁸⁴ *Brooke Group*, *supra* note 1, at 70,390.

¹⁸⁵ Glazer, *supra* note 67, at 619.

oligopolists that its entry was not competitive, indisputably reduced the probability that B&W would have succeeded in recouping its predatory losses. However, as the court noted early in its opinion, the United States cigarette industry had been one of the most concentrated and profitable industries for decades and on any reasonable consideration, its bi-annual price increases in excess of any cost rises yielded consistent supracompetitive profits. The influence of the factors which the court relied upon to preclude a finding of likely recoupment was sufficiently ambiguous that a jury could reasonably decide to resolve the issue in Liggett's favour. This is precisely the argument made by the Dissent in its conclusion:¹⁸⁶

In my opinion, the jury was entitled to infer from the succession of price increases after 1985 . . . that B&W's below-cost pricing actually produced supracompetitive prices, with the help of tacit collusion among the players. . . . But even if that were not so clear, the jury would surely be entitled to infer that B&W's predatory plan, in which it invested millions of dollars for the purpose of achieving an admittedly anticompetitive result, carried a 'reasonable possibility' of injuring competition.

Finally, as noted in subsection (b), one argument which the court used to justify its general scepticism towards claims of predatory pricing requiring tacit collusion for success was that because B&W held only a 12% of the cigarette market, it would have to generate approximately \$9 in supracompetitive profits for each dollar invested in the predatory losses in order to recoup its investment.¹⁸⁷ As Elzinga and Mills explain it, "[t]he Court was not prepared to endorse a theory of philanthropic predation."¹⁸⁸ The court's argument is erroneous. The court implicitly assumed that the consumers who were converting from branded to generic cigarettes were doing so in proportion to the market shares of the firms selling branded cigarettes. This implies that 12% of the consumers switching to the generic market were formerly consumers of B&W's brands. Yet this was not the case. As the court itself noted, "20% of the converts to Liggett's black and whites had switched from a Brown & Williamson brand."¹⁸⁹ Therefore the damage inflicted to the other cigarette manufacturers by Liggett's black and whites disproportionately impacted upon B&W. In the converse scenario, however, any benefit which B&W obtained from its scheme to reduce the rate at which consumers were

¹⁸⁶ *Brooke Group*, *supra* note 1, at 70,396.

¹⁸⁷ See text accompanying notes 112-113, *supra*.

¹⁸⁸ Elzinga & Mills, *supra* note 68, at 576.

¹⁸⁹ *Brooke Group*, *supra* note 1, at 70,379.

converting from branded to generic cigarettes would disproportionately benefit B&W. Because 20% of the converts were originally B&W's customers, it follows that if B&W was successful in stemming the rate, it would have gained 20% of the supracompetitive profits which would otherwise have been lost to the branded segment because of customers converting. Therefore, B&W was required to generate \$5 for each dollar invested in predatory losses, not the \$9 dollars argued by the court. To the extent that this factor was significant in the court's decision that recoupment was unlikely, the fact that their logic is erroneous implies that recoupment was more likely than the court concluded. Moreover, although the court argued that the supracompetitive profits obtained at no risk by the other manufacturers would have been a disincentive for B&W to engage in the scheme, a valid counterargument would be that these "riskless" profits acted as an incentive for the other manufacturers to collude in the success of the scheme.

The Implications of Brooke Group for U.S. Predatory Pricing Law

The first significant legal predatory pricing issue examined by the court concerned the basis of illegality under the *Robinson–Patman Act* and §2 of the *Sherman Act*. By harmonising the test of predation under either act—with the proviso that the attempt offence in §2 of the *Sherman Act* requires "a dangerous probability of actual monopolisation" whereas the *Robinson–Patman Act* only requires a "reasonable possibility" of substantial injury to competition—the court affirmed the unified approach which most lower courts had adopted to determining liability for predatory pricing under both acts. This laid to rest the argument that *Utah Pie*—where liability under the *Robinson–Patman Act* was found on the basis of transitory below-cost pricing, anticompetitive intent and a declining price structure—established a different set of prerequisites for liability for predation under the *Robinson–Patman Act* than for §2 of the *Sherman Act*.¹⁹⁰

After holding that the test for predation is equivalent under both the *Sherman* and *Robinson–Patman* acts, the court then specified two prerequisites for a finding of

¹⁹⁰ See *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, *supra* note 23.

predation: (i) prices must be “below an appropriate measure of . . . costs”¹⁹¹; and (ii) the alleged predator must have “had a reasonable prospect, or, under §2 of the Sherman Act, a dangerous probability, of recouping its investment in below-cost prices.”¹⁹² With regard to the first prerequisite, it is unfortunate that the court declined to specify which cost standard is appropriate, for, as it recognised, there is a “conflict among the lower courts over the appropriate measure of cost.”¹⁹³ The debate concerning most appropriate measure of cost has been conducted in the academic journals and on the court room floors ever since Areeda and Turner advanced their AVC test in 1975. With no apparent resolution in sight, some guidance from the Supreme Court may be the only way in which this issue will be resolved. To the extent that this is true, the court has yet again passed up an opportunity to settle the matter,¹⁹⁴ and given that some commentators view *Brooke Group* as the death knell for predatory pricing allegations,¹⁹⁵ the Supreme Court may have to wait some time for another opportunity.

One aspect of cost-based standards which the court has clarified is the question of whether prices above average total cost can ever be predatory. Since predation was defined by the court as involving pricing “below some appropriate measure of . . . costs”¹⁹⁶, this necessarily implies that prices exceeding average total cost will not be predatory. This decision represents a development in the court’s thinking since *Matsushita* and *Cargill* where the issue was expressly reserved. The reasoning which apparently persuaded the court to overcome its earlier indecision was derived from arguments expressed by Areeda and Hovenkamp on the issue. Citing these authors, the court stated:¹⁹⁷

As a general rule, the exclusionary effect of prices above a relevant measure of cost either reflects the lower cost structure of the alleged predator, and so represents competition on the merits, or is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate price competition.

¹⁹¹ *Brooke Group*, *supra* note 1, at 70,382.

¹⁹² *Ibid.*, at 70,383.

¹⁹³ *Ibid.*, footnote 1 at 70,382-70,383.

¹⁹⁴ The Supreme Court also declined to resolve the issue in *Matsushita* and *Cargill* in the 1986 term.

¹⁹⁵ See text accompanying notes 212-213, *infra*.

¹⁹⁶ *Brooke Group*, *supra* note 1, at 70,382.

¹⁹⁷ *Ibid.*, at 70,383 (citing Areeda, P. & Hovenkamp, H., *Antitrust Law (Supp. 1992)*. Boston: Little, Brown & Co., 1992, at ¶714.2, 714.3).

The second scenario envisaged by the court had previously been expressed by the First Circuit in *Barry Wright Corp. v. ITT Grinnell Corp.*¹⁹⁸ In that case, Breyer J. acknowledged the possibility that above-cost pricing could be harmful, but nevertheless advocated a deliberately underinclusive policy towards proscribing predation. In his opinion, the courts were not equipped to adjudicate such allegations and therefore mistakes would inevitably be made and legitimate, desirable price-cutting would be deterred.¹⁹⁹

With respect to predatory pricing allegations brought under the *Robinson-Patman Act*, *Brooke Group* would seem to have rendered subjective evidence of intent irrelevant to the determination of legality. This result did not arise from a comprehensive discussion of the role of intent but rather, from a combination of the facts before the court and omission. As already noted, the evidence of B&W's predatory intent was overwhelming²⁰⁰ and the court held that "reasonable jury could conclude that Brown & Williamson envisioned or intended . . . [the] anticompetitive course of events."²⁰¹ Yet despite this admission, the court then resigned the evidence of intent to the realms of irrelevancy by omitting to include the evidence in any stage of their test for legality, and in particular, in any part of the test for recoupment.

In the opinion of one commentator, the court's rejection of intent evidence may be the most important aspect arising out of the case. Glazer argues that the court's rejection of intent provides an instruction to lower courts that they "no longer have to defer to the considered judgment of marketplace actors."²⁰² It is argued that:²⁰³

There will be many circumstances in which the marketplace actors think one thing and the court another. . . . *Brooke Group* gives courts license to ignore such evidence when it conflicts with their own convictions about what will happen in the marketplace. It tells them that they need not be influenced by the marketplace actors themselves.

There is much to be said for the argument that evidence of anticompetitive intent which simply consists of emotive statements expressing some hostility or animus

¹⁹⁸ 724 F.2d 227 (1st Cir. 1983).

¹⁹⁹ See, Hay, G.A., "Predatory Pricing," *Antitrust Law Journal*, 58, 1990, 913-919, at 914-915; Austin, *supra* note 34, at 907-908.

²⁰⁰ See text accompanying notes 118-121, *supra*.

²⁰¹ *Brooke Group*, *supra* note 1, at 70,386.

²⁰² Glazer, *supra* note 67, at 626.

²⁰³ *Ibid*.

towards the plaintiff should be disregarded. However, the concern raised by Glazer is real and justified. Where the evidence clearly indicates that the defendant engaged in conduct which was calculated to harm a competitor for the purpose of obtaining or protecting supracompetitive profits, then the wisdom in rejecting such evidence must be questioned. As Glazer noted, “Liggett found itself in the position of relying on an unlikely a source as Frank Easterbrook, who wrote . . . ‘[w]isdom lags far behind the market [L]awyers know less about the business than the people they represent The judge knows even less about the business than the lawyers.’”²⁰⁴ The Dissent was expressing precisely the same sentiment when, in retort to the Majority’s statement that “an anticompetitive minuet is most difficult to compose and to perform, even for a disciplined oligopoly”²⁰⁵, it stated:²⁰⁶

I would suppose, however, that the professional performers who had danced the minuet for 40 or 50 years would be better able to predict whether their favorite partners would follow them in the future than would an outsider, who might not know the difference between Haydn and Mozart.

As a judge, Easterbrook stated in *Rose Acre* that “reference to intent *in principle* could help to disambiguate bits of economic evidence in rare cases.”²⁰⁷ Yet he then rejected intent as “a basis for liability (or grounds for inferring the existence of such a basis) in a predatory pricing case”²⁰⁸, on the grounds that “the cost (in money and error) of searching for these rare cases is too high—in large measure because the evidence offered to prove intent will be even more ambiguous than the economic data it seeks to illuminate.”²⁰⁹ Often evidence of intent will raise more questions than answers; yet it could hardly be claimed that the evidence of intent in *Brooke Group* was ambiguous. If *Brooke Group* indicates that such unambiguous evidence of intent does exist and will arise again, it is unfortunate if the court’s dicta precludes such evidence from being employed, not as a primary basis of liability, but as an aid to determining whether

²⁰⁴ Ibid., footnote 103 at 626 (citing Easterbrook, F.H., “The Limits of Antitrust.” *Texas Law Review*, 63, 1984, 1–40, at 5). Liggett also relied upon a statement made in 1918 by the Supreme Court in *Chicago Board of Trade v. United States* where it was stated that “knowledge of intent may help the court to interpret facts and to predict consequences.” (246 U.S. 231 (1918), at 238.)

²⁰⁵ *Brooke Group*, *supra* note 1, at 70,384.

²⁰⁶ Ibid., at 70,396.

²⁰⁷ *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, *supra* note 23, at 1402.

²⁰⁸ Ibid.

²⁰⁹ Ibid.

recoupment is plausible²¹⁰ or to deciding whether marginal cases of below-cost pricing (for example, where the alleged predatory price falls between AVC and AC) satisfy the cost threshold.²¹¹

The recoupment prerequisite enunciated by the court in *Brooke Group* is probably the most important development in United States predatory pricing law since courts began employing variants of the A-T rule shortly after 1975. In the eyes of some commentators, this development—if not “fatal to all future predatory pricing claims”²¹²—has erected “nearly insurmountable obstacles”²¹³ before predatory pricing plaintiffs. Others have lauded the standard, claiming that it is representative of the “[f]orces of both law and economics [which] have shifted the antitrust spotlight in predation cases away from the narrow issue of defendant’s short-run losses onto a larger issue: the overall economic rationality of defendant’s alleged predatory behaviour.”²¹⁴

Although there is some disagreement regarding whether *Brooke Group* will be easily distinguishable by lower courts,²¹⁵ the court clearly attempted to establish recoupment as a universal prerequisite for a finding of predation under either the *Robinson-Patman Act* or §2 of the *Sherman Act*. Yet as Calkins highlights, the court has failed to unambiguously specify what it actually means by a recoupment standard.²¹⁶ Recoupment may be tested by employing three different evidentiary bases: (i) whether the defendant believed that recoupment was feasible; (ii) whether, as determined at the beginning of the period of alleged predatory pricing, the possibility of recoupment

²¹⁰ An equivalent argument is made by Areeda & Hovenkamp in their commentary on *Brooke Group*. They state that “[b]y dismissing such evidence [of intent] without discussion, the *Brooke* Court may have invited the lower courts to discard important intent evidence along with the usual non-probative kind.” (Areeda & Hovenkamp, *supra* note 4, at ¶720’.) See, also, Beck, S.R., “Intent as an Element of Predatory Pricing Under Section 2 of the Sherman Act.” *Cornell Law Review*, 76, 1990, 1242-1284, at 1273; Comanor, W.S. & Frech, H.E. III, “Predatory Pricing and the Meaning of Intent.” *Antitrust Bulletin*, 38(2), 1993, at 307.

²¹¹ Hay, *supra* note 199, at 919. See, also, Beck, *ibid.*, at 1269-1272. For an early discussion of the importance of intent as a determinant of legality where the A-T test is the primary standard, see Greer, D.F., “A Critique of Areeda and Turner’s Standard for Predatory Pricing.” *Antitrust Bulletin*, 24(2), 1979, 233-261.

²¹² Glazer, *supra* note 67, at 606. Kenneth Glazer represented Liggett during all stages of litigation.

²¹³ Weber, M.E., “Practical Effects of *Liggett* on Predatory Pricing Litigation.” *Antitrust*, Fall, 1993, 38-41, at 38.

²¹⁴ Elzinga & Mills, *supra* note 68, at 560. Kenneth Elzinga and David Mills were consultants to Brown & Williamson for the purposes of the litigation.

²¹⁵ Calkins argues that *Brooke Group* will “often be distinguishable on its unique facts.” (Calkins, *supra* note 169, at 378.) cf. Glazer, *supra* note 67, at 621-624.

²¹⁶ See Calkins, *supra* note 169, at 399-402.

satisfied some degree of probability; and (iii) whether recoupment was actually achieved (or would have been achieved but for the litigation).²¹⁷

In introducing the recoupment requirement, the court in *Brooke Group* cited *Matsushita* with approval. It was held in that case that “[f]or the investment to be rational, the conspirators must have a *reasonable expectation* of recovering, in the form of later monopoly profits, more than the losses suffered.”²¹⁸ Thus the test alluded to in *Matsushita*, which was relied upon to justify the test provided in *Brooke Group* involved the first basis. Yet the court in *Brooke Group* then defined the test in terms of the second basis. It stated that for a claim of predation under the *Robinson–Patman Act* to be successful the plaintiff needed to prove that there was a *reasonable prospect* that the defendant would recoup its investment in below–cost prices.²¹⁹ Finally, the third basis was applied when the facts were evaluated for evidence of recoupment.²²⁰ The court examined whether recoupment could be said to have actually occurred and then investigated the likelihood of recoupment occurring by relying on *ex post* evidence.²²¹

Thus, in a kind of judicial schizophrenia, the court employed one basis to justify the recoupment prerequisite, a second to define the prerequisite, and a third to test the prerequisite. Conceivably this process of justification, definition and evaluation need not be invalid. Where the facts evidence a belief by the defendant that its predatory pricing strategy would work, a market environment which, at the time of implementation, was conducive to the strategy being successful, and no unexpected events occurred while the strategy was being effected so that it was actually successful, any of the three recoupment bases would accurately identify the defendant as satisfying the recoupment prerequisite. However, such perfect substitutability between bases is not guaranteed. As illustrated in *Brooke Group*, evidence of the first basis need not imply the existence of the second. While the court held that a “reasonable jury could conclude that Brown & Williamson envisioned or intended this anticompetitive course

²¹⁷ *Ibid.*, at 399.

²¹⁸ *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, *supra* note 37, at 588–589 (emphasis added).

²¹⁹ *Brooke Group*, *supra* note 1, at 70,383. The requirement of a “reasonable prospect” of recoupment was also mentioned at 70,386 and 70,390.

²²⁰ Calkins, *supra* note 169, at 400.

²²¹ For a discussion on the validity of using *ex post* evidence to infer the likelihood of an event occurring see text accompanying notes 225–226, *infra*.

of events”²²² it stated that “no evidence suggests that Brown & Williamson—whatever its intent in introducing the black and whites may have been—was likely to obtain the power to raise prices for generic cigarettes above a competitive level.”²²³ Similarly, evidence of the second basis does not necessarily imply existence of the third. For example, while the market conditions at the time the alleged predatory strategy was implemented may have been conducive to recoupment, an unexpected event could unfavourably affect these conditions with the result that recoupment does not actually occur.

Despite the court’s ambiguous signals regarding the proper basis for the recoupment standard, it can be inferred that the court fully intended that the second basis be employed. Notwithstanding its reliance on the statement in *Matsushita* which implied the use of the first basis, on numerous occasions the court defined the relevant investigation to be a determination of whether Brown & Williamson had a “reasonable prospect” of recoupment. This clearly implies an objective test. Furthermore, although the court did not engage in a substantial discussion concerning the relevance of subjective intent, its comments clearly indicate that it considered such evidence of intent to be irrelevant.²²⁴ Arguably the court’s rejection of this evidence implies that evidence that the defendants believed that they would recoup their investment in predatory prices will also be irrelevant.

As noted, the court argued that the second basis for recoupment could be proven by evidence of actual recoupment. Conceivably, the court thought that if recoupment actually occurred then it could be logically inferred that recoupment was a reasonable prospect at the time the allegedly predatory conduct was engaged in. Although such an inference may be correct in some circumstances, there are at least two dangers in relying on such logic. First, there is the problem of causation. The court attempted to determine whether recoupment actually occurred by examining whether there was any evidence “that oligopolistic price coordination in fact produced supracompetitive prices

²²² *Brooke Group*, *supra* note 1, at 70,386.

²²³ *Ibid.*

²²⁴ See text accompanying notes 200-201, *supra*.

in the generic segment.”²²⁵ Such an *ex post* examination necessarily evaluates outcomes which have been influenced by events which were unexpected at the time the allegedly predatory conduct was initiated. If the influence of these unexpected events is significant and the impact of these events cannot be easily identified or divorced from the effect of the allegedly predatory conduct, then it will be invalid to simply attribute the resultant outcome to the predatory conduct.

The second problem with inferring existence of the second basis from evidence of the third (or, for that matter, employing the third basis itself as the appropriate recoupment test) concerns the inherent problems with adopting reactive measures in condemning conduct. Calkins argues that the third basis is not necessarily wrong because even if there was unanimous agreement among experts that a predatory strategy which was implemented would be successful and some unexpected event occurred such that recoupment was rendered impossible, then regardless of whether a competitor had suffered injury, competition would not be harmed.

However, Calkins then poses the question “If the defendant is not liable, does this mean that records should remain perpetually open, legal outcomes should explicitly turn on subsequent events, and wrongful acts should go unpunished?”²²⁶ The answer to this question is that the second basis for recoupment must be employed as the primary means of evaluating whether the prerequisite of recoupment is satisfied. It is obviously impractical to indefinitely postpone an assessment of the legality of some conduct on the grounds that some future event may be so significant that it decides the case one way or another. Who is to say that in another week after the verdict is returned, a counteracting event may occur which implies that the result should be overturned? Furthermore, as already noted, as time progresses from the point when the conduct was engaged in, it becomes increasingly difficult to determine whether an outcome was a result of the conduct or some other influencing event. Therefore, while existence of the second basis may be inferred from evidence of the third, the problems which could render such an inference invalid must always be kept in mind. In particular, such an

²²⁵ *Brooke Group*, *supra* note 1, at 70,386.

²²⁶ Calkins, *supra* note 169, at 401.

inference should not be made where the actual outcomes (up until the trial date) cannot be reasonably attributed to the conduct under scrutiny.

One aspect of the recoupment test which the court did define precisely was the extent of supracompetitive profits required to be earned before recoupment could be said to have occurred. Specifically, the court required that the “scheme alleged would cause a rise in prices above a competitive level that would be sufficient to compensate [it] for the amounts expended on the predation, including the time value of the money invested in it.”²²⁷ This definition of recoupment implies that unsuccessful schemes, although detrimental to society,²²⁸ will be excluded from condemnation. In acknowledgment of this result, the court stated that “[a]lthough unsuccessful predatory pricing may encourage some inefficient substitution toward the product being sold at less than its cost, unsuccessful predation is in general a boon to consumers.”²²⁹ This conclusion has been questioned by Areeda and Hovenkamp. They argue that even unsuccessful predatory pricing schemes can cause significant harm to consumers and therefore the court’s stringent recoupment requirement should be rejected in favour of one which asks whether there is any evidence of actual or potential harm to consumers from the allegedly predatory conduct.²³⁰ The fundamental question of how this inquiry should be conducted is left unanswered by Areeda and Hovenkamp.

Game Theory and the Brooke Group Decision

The facts of *Brooke Group* do not fall conveniently within any of the three streams of game-theoretic predation models canvassed in part II, and therefore the decision cannot easily be examined in light of the insights provided by such models. However, the court makes a number of pronouncements which, while not directly addressing the relevance of game-theoretic predation models, do impact upon the manner that these models will be considered in the future.

²²⁷ *Brooke Group*, *supra* note 1, at 70,384.

²²⁸ See part II, note 6, *supra*.

²²⁹ *Brooke Group*, *supra* note 1, at 70,383.

²³⁰ Areeda & Hovenkamp, *supra* note 210.

Although it is not possible to precisely determine from the court's judgment whether it would view game-theoretic predation models favourably, on the whole, it appears that the court may not be ready to embrace such models immediately. The first sign of such a position was provided when the court recited with approval its dicta in *Matsushita* where it stated that "predatory pricing schemes are rarely tried, and even more rarely successful."²³¹ This comment was soon followed by the statement that "[i]n *Matsushita*, we remarked upon the general implausibility of predatory pricing. . . . *Matsushita* observed that such schemes are even more improbable when they require coordinated action among several firms."²³² The court's willingness to reiterate the general scepticism which pervaded the *Matsushita* decision despite the range of game-theoretic publications which may have tempered its attitude towards the rationality of predation, suggests that the court is, as yet, unpersuaded by the argument provided by such publications.

With regard to the court's two-tiered test of illegality, their pronouncements again indicate—although possibly not as clearly—an unwillingness to view game-theoretic predation models uncritically. The establishment of a recoupment test is not fundamentally in opposition to game-theoretic predation models. As Baker notes, conventional and game-theoretic economic "approaches differ on the plausibility of certain potential mechanisms for recoupment, not on the necessity for recoupment."²³³ However, the other part of the court's test does impact on the future acceptance of game-theoretic predation models. As the discussion in part II highlighted, a number of game-theoretic reputational and Deep Pocket predation models do not require prices to fall below any measure of cost to be rational behaviour.²³⁴ The court's restriction of illegality for predation to those cases where prices are below some measure of cost will therefore exclude all cases of predation involving above cost pricing. The court's decision to reject instances of predation which involve above cost pricing was made on pragmatic grounds. It has already been noted that the perfect judicial test for predatory

²³¹ *Brooke Group*, *supra* note 1, at 70,384 citing *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, *supra* note 37, at 589.

²³² *Ibid.*, at 70,384 (citations omitted).

²³³ Baker, *supra* note 171, at 594.

²³⁴ See part II, chapters B & C, *supra*.

pricing is a practical impossibility.²³⁵ Ultimately, the test which will be implemented will necessarily involve subjective assessments concerning the ease of administration, the welfare effects of different tests and the prevalence of various types of predation. The court's decision in *Brooke Group* must be seen in this light.²³⁶

The same argument cannot be made about the court's decision to exclude subjective evidence of intent as a basis of liability. The importance of this result to any future allegations of predation which rely on game-theoretic models is apparent when the difficulty in accurately identifying these new models of predation is considered. As Roberts states, "establishing that a particular pattern of behaviour was in fact predatory may involve a determination of intent, plus a very detailed reconstruction of informational conditions."²³⁷ Roberts then continues by suggesting that the Bork–McGee–Easterbrook hypothesis that predation should not be proscribed may be worthy:²³⁸

Although prosecuting predation under such a standard of law might represent a bonanza for lawyers and expert economic witnesses, it would not obviously be more desirable socially than simply allowing predation.

Given that the Supreme Court in *Brooke Group* decided not to follow the route advocated by Bork, McGee and Easterbrook, Roberts's statement regarding the importance of intent remains relevant. The argument for retaining subjective evidence of intent as a means of identifying game-theoretic predation is simply that such predation models are so intricate and rely on such unidentifiable determinants as the information environment, that subjective intent could be the only possible means to identify that such a predatory strategy had been implemented. This argument implicitly rejects simple statements of hostile intent. Rather, it claims that detailed plans and strategies should be able to be considered under the *Brooke Group* two-tiered test, at least as evidence that the defendant believed that recoupment was possible. Rejecting subjective evidence of intent simply eliminates another means by which the less blatant predatory strategies may be proven. Given the subtleties of many game-theoretic

²³⁵ See part II, chapter C, section 5, *supra*.

²³⁶ For a similar argument on the court's decision to include a cost threshold, see Baker, *supra* note 171, at 592-593.

²³⁷ Roberts, *supra* note 10, at 186.

²³⁸ *Ibid.*

predation models, to the extent that the court recognised that rejecting subjective intent evidence would have this effect, their decision to ignore this evidence indicates that the court is not favourably predisposed to such intricate models of predation.

(f) Conclusion

The Supreme Court's judgment in *Brooke Group* may be both commended and criticised. On the one hand, the two-tiered test provided by the court in *Brooke Group* represents a major advancement in judicial analysis of predatory pricing allegations. While valid concerns may be expressed about the test—e.g. above-cost pricing can be anticompetitive under certain market conditions; below-cost pricing is inherently harmful to competition; and competition is harmed absent full recoupment—the actual significance of these problems involves a subjective assessment and the court has chosen a pragmatic approach to resolve these concerns. It has decided to eliminate the opportunity for bringing claims of predation which argue any of the preceding concerns in favour of establishing a test which—it believes—provides some degree of certainty to business, is capable of being accurately applied by the judiciary, and is sufficiently flexible to capture the majority of predatory pricing strategies. Obviously, whether the court's two-tiered test actually satisfies these characteristics involves a subjective assessment but it, at least, must be commended for indicating its position on these subjective questions.

On the other hand, that the test advocated by the court is commendable does not imply that the court correctly applied the test, nor that the other legal implications of the decision are worthy of praise. As has been shown, the Supreme Court's application of their test to the facts cannot be considered to be robust. The analytical and logical deficiencies are too prominent for the ultimate finding to be viewed with any significant degree of comfort. This feeling of unease is exacerbated by the fact that, on any reasonable examination, Brown & Williamson's intent in engaging in their pricing strategy was anticompetitive. Nevertheless, with little or no discussion surrounding the relevance of intent, the court concluded, contrary to the expectations of B&W management, that the strategy was not, and had no reasonable probability of being, successful. The argument that it is unwise for a court to second-guess the expectations

of market participants regarding the probable future behaviour of the markets has a strong and valid basis. The court's decision to reject all evidence of intent is therefore unfortunate, for in those instances when the evidence unambiguous, it could undoubtedly prove probative in determining whether recoupment was probable.

Other aspects of the court's judgment are also disappointing. In particular, *Brooke Group* provided a clear opportunity for the Supreme Court to unify the divergent standards which had developed within the various circuit courts. In some respects, the provision of the two-tiered test serves this role; however, the extent to which the test serves this role is tempered by the new questions which arise as a result of the judgment and those old questions which the court either declined or failed to address. Many contentious issues regarding prerequisite of below-cost pricing remain unresolved after the decision despite the relevance of this factor within the new test. Similarly, the judgment has not provided an unambiguous definition of recoupment nor did it clearly identify the process for evaluating the existence of this requirement. Therefore, this determinant of liability will need to be the subject of some judicial (and academic) discussion before it will be consistently and accurately applied. If history is any guide, the debate will be long-lived and subject to widely divergent opinions and the ultimate answer will require a trade-off between theoretical precision and pragmatism. Moreover, it will not be apparent when the "right" trade-off has been achieved.

Without a doubt, *Brooke Group* will have a significant impact upon future United States predatory pricing litigation and adjudication. Some have claimed that this impact will be in sounding the death knell for predatory pricing actions.²³⁹ Such statements presuppose that future allegations will not be sufficiently robust to survive the test imposed by the courts. If *Brooke Group* is any indication of the ability of the courts to apply the test to the facts of a case, then such a claim may well be justified. However, if the courts correctly apply the test and potentially successful predatory pricing is actually attempted, *Brooke Group* will not mark the extinction of predation cases within the United States.

²³⁹ See text accompanying notes 212 & 213, *supra*.

2 *AKZO Chemie BV v. E.C. Commission*

(a) **Judicial Predatory Pricing Tests in the E.E.C.**

The *Treaty Establishing the European Economic Community* (hereafter referred to as the “*Treaty of Rome*”) was signed in Rome in 1957 for the purpose of creating a common market among the signatory states. Article 2 of the *Treaty of Rome* states that the task of the Community is to “promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increase in stability, an accelerated raising of the standard of living and closer relations between the States belonging to it.”²⁴⁰ Competition was identified as being a primary tool by which these goals would be achieved and, in order that this tool may operate in the desired manner, it was realised that competition rules were necessary. To this end, Art. 3(f) was included and requires “the institution of a system ensuring that competition in the common market is not distorted.”²⁴¹

Articles 85 to 94 constitute the legal parameters of EEC competition law, although only Articles 85 and 86 are prohibitory.²⁴² The former prohibits agreements between undertakings which may prevent, restrict or distort competition within the common market whilst the latter proscribes abuses of a dominant position. These articles must be viewed in light of the unique objectives which guide EEC competition law. In contrast to the US where economic efficiency is the primary (if not the unitary) objective of the antitrust laws, EEC competition law is concerned with a multiplicity of policy objectives.²⁴³ The primary objective is to promote the integration of the

²⁴⁰ Art. 2, *Treaty of Rome* 1958.

²⁴¹ Art. 3(f), *Treaty of Rome* 1958.

²⁴² Article 86 of the *Treaty of Rome* states:

Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

- (a) directly or indirectly imposing unfair purchase or selling prices or unfair trading conditions;
- (b) limiting production, markets or technical development to the prejudice of consumers;
- (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

²⁴³ See Hawk, B.E., *U.S., Common Market and International Antitrust: A Comparative Guide (1990 Supp.)*. Clifton: Prentice Hall, 1990, at 5-16; Hawk, B.E., “The Proposed Revisions to the Justice Department’s Antitrust Guidelines for International

economies of the Member States into a common market. Where a conflict exists between this and other objectives, the latter are subsumed by the goal of integration and therefore it is the most important influence upon specific EEC competition policies.

The second major goal of EEC competition policy is the promotion of effective competition in the Community. The EEC notion of competition differs substantially from that employed in the US. Whereas competition is considered in the US to be solely an economic concept, social concerns are also included in the EEC. Therefore, while the economic considerations of allocative, productive and dynamic efficiency are important, non-economic issues—other than the overriding non-economic objective of integration—are also regarded as being legitimate concerns of competition policy. The Commission of the European Communities (hereafter referred to as the “Commission”) generally classifies these social concerns under the rubric “fairness in the market place”.²⁴⁴ This objective requires the Commission consider the preservation of an equal opportunity for all commercial parties to compete, the encouragement of small and medium-sized firms, and the legitimate interests of workers, users and consumers by acknowledging distributive concerns and employment.

The *AKZO* case represents an extremely important development in the history of EEC competition law. Although it was widely believed that unilateral pricing behaviour would be illegal under Art. 86,²⁴⁵ prior to *AKZO*, neither the Commission nor the European Court of Justice had presided over a case involving issues of predatory pricing and therefore there was no judicial confirmation of this belief. The Commission’s decision in *AKZO* was expected to answer the questions of whether, and in what manner, predatory pricing could constitute a breach of Art. 86, and more importantly, what level of minimum pricing would be accepted within the EEC.²⁴⁶ However, the

Operations and Recent Developments in EEC Competition Law.” *Antitrust Law Journal*, 57, 1988, 299-314, at 306-307; Commission of the European Communities, *Ninth Report on Competition Policy*. Luxembourg: Office for Official Publications of the European Communities, 1980, ¶9-11.

²⁴⁴ Commission of the European Communities, *Ninth Report on Competition Policy*, *ibid*.

²⁴⁵ Similarly, pricing behaviour by colluding undertakings will be illegal where the conduct breaches Art. 85. In keeping with the focus of the thesis on unilateral predatory pricing, the prohibition of collusive predatory behaviour within the EEC will not be examined.

²⁴⁶ For a commentary on the different views regarding the prohibition of predatory pricing before *AKZO* and the likely standard which would be adopted by the Commission to assess such pricing behaviour, see Ashley, D.J., “Predatory Pricing Under Article 86 of the Treaty of Rome.” *International and Comparative Law Quarterly*, 32, 1983, 1004-1012.

ultimate decision was greeted with criticism. It was claimed that the Commission failed to establish a clear standard which would provide certainty and guidance to business on the legality of low pricing, that the vague standard adopted relied too heavily on subjective intent and that an insufficient regard was paid to cost-based tests. The appeal to the Court of Justice provided an opportunity for the deficiencies in the Commission's decision to be rectified and thus, a great deal of interest and some high expectations, surrounded the court's decision. Of the few commentaries produced on the court's decision, most are supportive of the standard established by the court and conclude that it represents an advancement on that provided by the Commission. This section critiques the decision of the European Court of Justice in *AKZO* and focuses on the conflicting standards established by the Commission and court. It is concluded that the Commission's standard does not provide certainty and guidance, but also that these deficiencies are a necessary outcome of a number of justified concerns which the court, in providing a more rigid (and certain) standard, fails to address.

(b) Facts of the Case

AKZO Chemie BV (hereafter referred to as "AKZO") was a wholly-owned subsidiary of AKZO NV, a large Dutch chemical and fibre manufacturing company. AKZO and its subsidiaries comprised the speciality chemicals division of AKZO NV and produced primarily organic peroxides. Organic peroxides act as "initiators" in various processes involved within the manufacture of plastics. There are three principal uses of organic peroxides in the plastics industry, two of which account for 80% of the total consumption of organic peroxides. No substitute products existed for organic peroxides for either of these applications. Certain sulphur products could be employed as substitutes for organic peroxides in the third, and smallest, field of application. However, because of the different technical properties of these sulphur compounds, they were not considered complete or perfect substitutes for organic peroxides. Benzoyl peroxide was the major organic peroxide produced for use in the plastics industry. Benzoyl peroxide was also used in many countries as an agent to bleach flour which is used for bread. Within the E.E.C., however, only the United Kingdom and Ireland allowed it to be used for this purpose. In addition to benzoyl peroxide, other additives,

mainly potassium bromate and vitamin mixes, were usually added to bread during the milling or baking production stages.

In 1981, AKZO estimated that its market share of the European organic peroxides market was approximately 50% and this had been stable for several years. A small number of competitors supplied the same market, but AKZO considered itself to be the superior firm. The market shares of its major competitors had remained stagnant over the preceding five years, and, in AKZO's opinion, although the second-placed Interlox had the technical knowledge to compete with AKZO, its weak marketing organisation restricted it from being able to capture market share.

Through its wholly-owned United Kingdom subsidiary, AKZO Chemie U.K. Ltd. (hereafter referred to as "AKZO UK"), AKZO also held a strong position within the UK and Ireland flour additives market. Only three firms supplied the complete range of flour additives consisting of benzoyl peroxide, potassium bromate and vitamin mixes. In 1982, AKZO UK estimated its market share to be 52% whilst those of Engineering and Chemical Supplies (Epsom and Gloucester) Ltd. (hereafter referred to as "ECS") and Diaflex were estimated at 35% and 13% respectively. The producers had sometimes made co-producer or assitry deliveries between themselves to provide for shortfalls in production or to obtain additives which they did not make themselves. Under this arrangement, AKZO UK supplied Diaflex with virtually all of their requirements for bulk benzoyl peroxide and ECS with quantities of benzoyl peroxide while ECS had provided vitamin mixes to AKZO UK. The market was populated by three categories of buyers. The first category consisted of three large milling organisations which together accounted for approximately 85% of the total demand for flour additives. Of these purchasers, RHM and Allied Mills each acquired approximately 31% of the market output and Spillers the remaining 23%. The second and third categories of buyers consisted of large and small independent mills which represented 10% and 5% of the market demand respectively.

Prior to the dispute, AKZO UK and Diaflex sold the various flour additives at virtually identical prices while the prices charged by ECS were generally ten percent lower. For several years all three firms concurrently increased prices by ten percent

once or twice a year and thus, as was acknowledged by AKZO UK, the market was “characterised by stable, steadily rising prices.”²⁴⁷ All companies sold to the large milling groups at a discount to the prices charged to the independents because of the greater volume purchased by the former companies. Of the large milling companies, RHM and Spillers divided their purchases between AKZO UK and Diaflex, and Allied Mills, through their central purchasing agent, Provincial Merchants Ltd., bought exclusively from ECS (with the exception of one mill which bought from AKZO UK). ECS also supplied around two-thirds of the independent mills with AKZO UK supplying the remainder.

Prior to 1977, ECS acquired benzoyl peroxide in bulk from AKZO UK and blended it into suitable concentrations to supply to the UK and Ireland flour additives market. In 1977, it began manufacturing its own product at a cost which was, by its own calculations, less than that of AKZO UK. By 1979 ECS was supplying around a third of the market and it decided to expand into the more lucrative plastics market. Initially its sales in the plastics market were restricted to UK customers, but in September 1979, a consignment of benzoyl peroxide was sold to BASF in Germany, who had, up to that date, been one of AKZO’s major customers. This sale precipitated the current dispute.

Soon after hearing of the sale to BASF, senior executives of AKZO UK requested a meeting with ECS in the middle of November. ECS alleged that AKZO UK, acting on instructions from AKZO, threatened that unless ECS stopped supplying to the plastics market, AKZO UK would retaliate by implementing both uniform and selective price reductions in the flour additives market, the latter targeting ECS buyers. AKZO UK allegedly stated that they were prepared to price below cost if necessary and that the losses would be subsidised by the profits earned in the plastics market. ECS claimed that the threats were repeated two weeks later at a second meeting in which the product manager from AKZO also participated. A few days later, ECS applied for an

²⁴⁷ *Engineering and Chemical Supplies v. AKZO Chemie BV* [1986] 3 C.M.L.R. 271 at 284.

injunction under Art. 86 of the *Treaty of Rome* in an *ex parte* hearing in the High Court in London.

In the proceedings, AKZO UK denied the allegations, contending in defence that the meetings were simply requested to inform ECS that the assistory deliveries of benzoyl peroxide and other additives could no longer be maintained in light of ECS's entry into the plastics market. AKZO UK intended to adopt a more aggressive sales policies within the flour additives market and the meetings were simply requested to inform ECS of this as a matter of courtesy. Ultimately an out of court settlement was reached with the effect that AKZO UK undertook to not reduce prices for benzoyl peroxide in either the flour additives market and the plastics market "with the intention of eliminating [ECS] as competitors" for a period of two-and-a-half years from March 1980.

Following the settlement, ECS was approached by Spillers to quote for the supply of benzoyl peroxide and potassium bromate. ECS quoted the same price which it charged to the Allied Mills group, these prices being 12% and 17% lower than those charged by AKZO UK to Spillers for benzoyl peroxide and potassium bromate respectively. Spillers informed AKZO UK of ECS's quote and AKZO UK immediately reduced its prices to match ECS thereby retaining the Spillers contract. ECS's quote to Spillers prompted AKZO UK to approach Provincial Merchants and quote discount prices with a view to supplying Allied Mills. No additives were sold as a result of these quotes.

In July 1980, Spillers contacted all three flour additive manufacturers requesting quotes for six and twelve month supply contracts. ECS's quote for its standard mix was equal to that charged to Allied Mills, although, at the request of Spillers, it reduced its quoted prices for a special mixture using inferior compounds. Diaflex quoted slightly cheaper prices than ECS's for the same non-standard mixture, although its compounds were slightly inferior to those used by ECS, and thus less expensive. Spillers again informed AKZO UK of the competing quotes and AKZO UK retained the supply contract by quoting a price £1 lower for its standard formulation with the proviso that Spillers obtain its total requirements from AKZO UK.

In July 1980, RHM approached ECS requesting quotes for flour additives. ECS again quoted prices equivalent to those charged to Allied Mills but no business resulted. In November, Diaflex heard of the ECS offer and informed AKZO UK of the quote. Despite the quote being unsuccessful, Diaflex impressed upon AKZO UK that in the future both companies would have to reduce their prices to RHM if they wished to retain the contract. AKZO UK subsequently reduced its prices to RHM three times in the following 16 months. The ECS quote to RHM also provoked a general aggressive pricing response by AKZO UK. It approached Provincial Merchants for a second time, and quoted the same price for its standard mixture as it had provided to RHM (i.e. £1 lower than the prices quoted by ECS to Spillers for the special inferior mixture). When this quote brought no business, AKZO UK approached the individual mills in the Allied Mills group quoting them the same prices. Significantly, up until that time, AKZO UK had charged Coxes Lock, the one mill of the Allied Mills group which was its customer, the same prices as it charged its large independent customers which was 20% greater than that charged by ECS to Allied Mills.

AKZO UK also approached each of the large independent mills supplied by ECS and offered them prices which were well below those offered by ECS and which were 20% to 30% lower than the prices charged by AKZO UK to their existing large independent customers. A few days later, Diaflex approached two of the large independents supplied by ECS and offered them prices similar to those offered by AKZO UK. As a result of these aggressive pricing policies, in a little over two years after settling the High Court action, AKZO UK gained the business of three large independent mills and a number of mills in the Allied Mills group all of which had previously been supplied by ECS. Further gains from ECS were only stemmed by ECS matching AKZO UK's prices.

In June 1982, ECS lodged a complaint with the Commission regarding AKZO UK's pricing policies. As a result of the complaint, the Commission carried out surprise investigations at the premises of AKZO and AKZO UK but no action was taken as a result of these investigations. In January 1983, AKZO UK again reduced its prices, compelling ECS to further decrease its prices in order to retain customers. In May of that same year, ECS lodged a second complaint with the Commission and sought

interim measures pending a full investigation. The Commission granted these measures ordering that AKZO UK return to the profit margins it had maintained in the flour additives market prior to the dispute and prohibiting AKZO UK from selling these additives below specified prices or from offering different prices or conditions to similar customers. AKZO UK was, however, permitted to reduce its prices if it was “necessary in good faith to do so to meet (but not to undercut) a lower price shown to be offered by another supplier ready and able to supply the same product’ [*sic*] to the customers in question.”²⁴⁸ AKZO UK nevertheless continued to reduce prices after the decision, usually by aligning its prices to those offered by Diaflex, and as a result obtained the further business from customers previously supplied by ECS.

AKZO UK contested all the important factual evidence submitted by ECS as proof of their allegations of unfair pricing. The Commission rejected these defences and held in respect of the allegations involving predatory pricing that:²⁴⁹

AKZO Chemie BV infringed Article 86 of the EEC Treaty by pursuing against ECS a course of conduct intended to damage ECS’s business or to secure its withdrawal from the EEC organic peroxides market, or both, the essential features of which consisted of:

- (i) making direct threats to ECS in meetings in late 1979 with the aim of securing ECS’s withdrawal from the market for organic peroxides for the ‘plastics’ application;
- (ii) from about December 1980 onwards systematically offering and supplying flour additives to Provincial Merchants, Allied Mills and the customers of ECS in the ‘large independent’ sector at unreasonably low prices designed to damage ECS’s business viability in that ECS was obliged either to abandon the customer to AKZO Chemie BV or to match a loss-making price in order to retain the customer;
- ...
- (v) maintaining, as part of the plan to damage ECS, the prices for flour additives in the United Kingdom at an artificially low level over a prolonged period, a situation which it could survive because of its superior financial resources in comparison with ECS.

The Commission imposed a record fine of 10 million ECU’s²⁵⁰ upon AKZO. AKZO appealed the Commission’s decision to the Court of Justice on two substantive grounds: (i) defective administrative procedure; and (ii) erroneous application of Art. 86. Only the second cause of action will be critiqued in this thesis.

²⁴⁸ *AKZO Chemie BV v. E.C. Commission* [1993] 5 C.M.L.R. 215 at 226.

²⁴⁹ *Engineering and Chemical Supplies v. AKZO Chemie BV*, *supra* note 247, Article 1 at 318.

²⁵⁰ European Currency Units (ECU’s) is the currency used to calculate companies turnover and to impose fines under the competition rules. The value of the ECU is derived from a basket of currencies of Member States.

(c) Decision of the European Court of Justice

The court issued its judgment on 3 July 1991, almost two and a half years after the Opinion of the Advocate General²⁵¹ and nearly a decade after the original complaints were made. In spite of this extremely long period of deliberation the judgment was characterised by brevity and frustrating superficiality. The court's analysis of the factual and legal issues was anything but rigorous with the result that many questions remained unanswered. Nevertheless, on the basis of its analysis, the court upheld the Commission's findings with respect to the predatory pricing allegations and imposed a 7.5 million ECU fine upon AKZO.

AKZO had advanced four separate arguments before the court to dispute the Commission's conclusion that it had breached Art. 86. Specifically, it claimed that the Commission had:

- incorrectly defined the relevant market as the market for organic peroxides;
- incorrectly regarded the organic peroxides market as a single market;
- concluded that AKZO held a dominant position within the organic peroxides market on the basis of incorrect facts; and,
- incorrectly concluded that AKZO's pricing behaviour was abusive.

AKZO argued that the organic peroxides market could not be the relevant market because its allegedly unlawful behaviour occurred solely in the market for flour additives. The court rejected this argument for three reasons. First, it observed that AKZO's price reductions were instituted in the flour additives market which was vital to the existence of ECS but only of limited importance to AKZO because of its position in the larger plastics market. Second, it was noted that AKZO's established position in both markets enabled the subsidisation of any losses in the flour additives market by profits in the plastics market, whereas such a strategy was not available to ECS. Finally, the court considered certain statements made by one of AKZO's managers to be important. These statements indicated that AKZO UK engaged in its aggressive pricing

²⁵¹ The Court of Justice is assisted in all cases by an Advocate General who submits an opinion to the court. These opinions have an authority and precedential value equal to that of the court. Where the court declines to follow the submission of the Advocate General, the opinion is probably equivalent to a dissenting judgment. (See, generally, Rose, V. (ed.), *Bellamy & Child: Common Market Law of Competition* (4th ed.). London: Sweet & Maxwell, 1993, at ¶1-064.)

behaviour in the flour additives market to retain its position within the more lucrative plastics market rather than for the primary purpose of strengthening its position in the flour additives market.

AKZO further contended that a single market for organic peroxides could not be justified by reason of either substitutability or complementarity. It was claimed that different organic peroxides could not be used as substitutes for one another and because purchasers do not source all requirements for organic peroxides from single suppliers, peroxides cannot be grouped into a single market by virtue of being complements. AKZO's arguments were again rejected. The court cited *L'Oreal v. De Nieuwe Amck*.²⁵²

[T]he possibilities of competition must be judged in the context of the market comprising the totality of the products which, with respect to their characteristics, are particularly suitable for satisfying constant needs and are only to a limited extent interchangeable with other products.

The court then observed that although organic peroxides can be supplied in a range of concentrations to satisfy customers' individual requirements, 90% of total supply is applied to uses within the plastics industry in satisfying that industry's needs. Moreover, substitutes could only be said to exist for organic peroxides in ten percent of its uses, and even these were not perfect substitutes because of their inferior technical qualities. Finally, the court held it to be relevant that AKZO regarded organic peroxides as a separate market for the purposes of calculating market shares in its internal documents.

The Commission relied upon a variety of factors to conclude that AKZO held a dominant position in the organic peroxides market including AKZO's substantial and stable market share, its ability to maintain profit margins in periods of economic downturn, its superior product range, its superior technical knowledge and knowledge in marketing, safety and toxicology, and its self-admitted ability to neutralise competitive pressures created by the behaviour of smaller competitors. AKZO advanced two arguments to dispute this conclusion. First, it stated that the Commission's assessment

²⁵² *AKZO Chemie BV v. E.C. Commission*, *supra* note 248, at 278 citing *L'Oreal v. De Nieuwe Amck*, [1981] 2 C.M.L.R. 235, at ¶25.

of AKZO's market share was incorrect because the organic peroxides market was not the relevant market. Second, it claimed that the fact that AKZO offered a wider range of products did not constitute evidence of a dominant position. Neither argument was accepted by the court. As the court had already determined that the Commission's assessment of the relevant market was correct, the first argument was quickly rejected. As to the second argument, the court held that because the relevant market was defined as that for organic peroxides it was obvious that AKZO's wider product range in this market contributed to its position of dominance.

In its discussion on AKZO's dominant position, the court did not restrict itself to rejecting AKZO's arguments but continued by briefly mentioning the relevance of market share and the other factors relied upon by the Commission. In particular, the court noted that AKZO's internal documents stipulated that AKZO held a stable 50% market share. Relying upon its decision in *Hoffmann-La Roche v. E.C. Commission*²⁵³, the court then stated that "very large shares are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position . . . [T]hat is the situation where there is a market share of 50 per cent. such as that found to exist in this case." Thus, on the basis of AKZO's market share and the other contributing factors, the court refused to reject the Commission's conclusion that AKZO held a dominant position in the European organic peroxides market.

Having rejected AKZO's arguments regarding the relevant market and dominance, the court then considered the issue of whether AKZO's behaviour constituted an abuse of their dominant position within the meaning of Art. 86. The first stage of this evaluation required the identification of an appropriate standard of illegality. The Commission submitted that cost-based tests should not be determinative of the legality of pricing behaviour. Emphasising that such tests are myopic in nature and thus fail to give adequate consideration to the strategic aspect of price-cutting, it argued that this deficiency would cause such tests to fail to comply with the general objectives of E.E.C. competition law as stipulated in Art. 3(f) and in particular "the need

²⁵³ *Hoffman-La Roche v. E.C. Commission* [1979] 3 C.M.L.R. 211.

to guard against the impairment of an effective structure of competition in the Common Market.”²⁵⁴ Furthermore, the Commission concluded that “there can be an anti-competitive object in price-cutting whether or not the aggressor sets its prices above or below its own costs, whatever the manner in which these costs are understood.”²⁵⁵

Nevertheless, the Commission submitted that cost-based tests are of importance in determining whether pricing conduct is reasonable or otherwise. As the court observed, the Commission argued that “[t]he exclusionary consequences of a price-cutting campaign by a dominant producer might be so self-evident that no evidence of intention to eliminate a competitor is necessary.” On those occasions when the price-cutting is susceptible to a number of explanations, evidence of anticompetitive intent would be relevant to the determination of legality.

In contrast to the Commission’s proposed standard of illegality, AKZO argued that a cost-based test should be solely determinative of legality. AKZO appeared to have been strongly influenced by the early writings of Areeda and Turner because its submitted test and justifications for this standard are identical to those forwarded by the two professors. AKZO contended that “[t]here is no abuse if the dominant undertaking endeavours to obtain an optimum selling-price and a positive coverage margin.”²⁵⁶ It explained that the requirement of an “optimum selling price” is satisfied if the firm is selling at its short-run profit maximising price, whilst the requirement of a “positive selling margin” means that in all circumstances, price must exceed AVC. To rebut the claim that an AVC rule would neglect long-run or strategic considerations, AKZO repeated the Areeda and Turner argument that the long-run is too uncertain for firms to realistically make short-run decisions (such as pricing) which will maximise long-run profits.

Although the court did not accept AKZO’s standard *in toto*, it held the following cost-based test to be appropriate:

²⁵⁴ *AKZO Chemie BV v. E.C. Commission*, *supra* note 248, at 307.

²⁵⁵ *Ibid.*, at 280.

²⁵⁶ *Ibid.*

1. Prices below AVC are abusive; and
2. Prices between AVC and AC are abusive “if they are determined as part of a plan for eliminating a competitor.”²⁵⁷

The court justified the first part of its standard by arguing that because pricing below AVC forces a firm to incur in excess of its fixed costs, “[a] dominant undertaking has no interest in applying such prices except that of eliminating competitors so as to enable it to subsequently raise its prices by taking advantage of its monopolistic position.”²⁵⁸ The second part was justified on the grounds that pricing between AC and AVC could potentially eliminate equally efficient from the market for the pure reason that they have access to fewer financial resources.

Having identified the appropriate standard by which AKZO’s pricing behaviour should be assessed for its legality, the court then sought to apply this standard to the allegedly abusive pricing behaviour. The court firstly examined the alleged threat made by AKZO to ECS to induce the withdrawal of the latter from the plastics market. Relying upon the content of a number of documents, the court was satisfied that sufficient evidence existed to conclude that AKZO intended to price below-cost in the flour additives market if ECS continued to supply benzoyl peroxide to the plastics industry. In particular, the court relied on internal AKZO documents which both stipulated this intention and specified a detailed plan to approach and gain ECS’s major customers by offering below-cost prices.

While the total costs for AKZO over the relevant period were uncontentious, AKZO disputed the Commission’s assessment of its variable costs. The parties submitted very different assessments of AKZO’s variable costs as a result of disagreements over whether certain costs should be classified as fixed or variable. Particular issue was taken over the cost of labour. The Commission submitted that labour costs are traditionally considered variable, whilst in its defence AKZO supplied evidence which showed no direct correlation between output and labour costs. The court held that “an item of cost is not fixed or variable by nature” and on this basis

²⁵⁷ *Ibid.*, at 281.

²⁵⁸ *Ibid.*

accepted AKZO's evidence that labour and output were not correlated and concluded that labour be classified in this case as fixed. As a consequence, the court accepted the variable cost figures submitted by AKZO.

After determining the total and variable costs for AKZO over the relevant periods, the court first examined AKZO's allegedly abusive pricing behaviour in relation to Allied Mills. The Commission contended that AKZO had offered "additives to Allied Mills or the mills in the Allied group at unreasonably low prices with the aim of damaging ECS."²⁵⁹ AKZO denied these allegations and claimed in their defence that they were forced to offer reduced prices to Allied Mills in an attempt to recoup the revenue lost from RHM and Spillers as a result of matching ECS's low quotations to these customers. AKZO further contended that its prices could not be considered unreasonably low by virtue of the fact that they were equivalent to those offered by ECS to Spillers three months earlier and, in any event, the prices offered to Allied Mills exceeded AKZO's AVC.

The court rejected AKZO's arguments by relying on evidence of AKZO's intent. It was observed that the allegedly unreasonable prices fell between AKZO's AVC and AC for the relevant period. Therefore, under the court's standard, evidence of an intent to eliminate a competitor was required before the prices could be considered abusive. The court found such evidence in the form of a note prepared by an AKZO representative which showed that the prices quoted to Allied Mills were calculated to ensure that they were well below those offered by ECS to Allied Mills. The court concluded that "[t]his shows that AKZO's intention was not solely to win the order, which would have induced it to reduce its prices only to the extent necessary for this purpose."²⁶⁰ The court then stated that by aligning the quotes it offered to Allied Mills with those offered by ECS to Spillers, AKZO's objective was to price the lowest it could while maintaining the appearance that it was not breaching its undertaking made pursuant to the High Court action that it would not decrease its prices for benzoyl peroxide with the intention of eliminating ECS.

²⁵⁹ *Ibid.*, at 285.

²⁶⁰ *Ibid.*, at 286.

The court then examined the allegedly unreasonable prices quoted by AKZO to the large independents which were customers of ECS's. AKZO tendered the same arguments as it had submitted in defence of its pricing to Allied Mills, but they were again unsuccessful. The court held that AKZO had quoted prices for four different products which, on a number of different occasions, were between AKZO's AVC and AC. It also held that in one instance, AKZO quoted a price for a product which was less than its AVC. The court then inferred that AKZO held the requisite intent to damage ECS on the basis that:²⁶¹

[AKZO's] prices [quoted to ECS's large independent customers] are well below what was necessary to compete with ECS, since, compared with the prices charged by ECS at that time, they show a difference of more than £70 for benzoyl peroxide 16 per cent., more than £100 for benzoyl peroxide 6 per cent. and more than £60 for vitamin mixes.

The court then considered the Commission's finding that AKZO had maintained its prices charged to RHM and Spillers for various products at unreasonably low levels for a prolonged period in order to damage ECS, and that it was able to sustain these losses by virtue of its superior financial resources. In its defence, AKZO argued that the prices charged to RHM and Spillers were necessary to counter the prices offered by ECS and Diaflex to these customers. Counterarguing, the Commission stated that although it agreed in principle that a dominant firm has the right to align its prices, AKZO's argument was invalid because the prices charged by Diaflex were effectively controlled by AKZO. In support of this allegation, the Commission presented a number of documents relating to the RHM and Spillers contracts which indicated that AKZO and Diaflex had consulted over the appropriate prices to charge, AKZO had contacted Diaflex at least once to persuade them to raise its prices, an AKZO adviser had queried Diaflex as to whether an unwritten law existed with AKZO to the effect that Diaflex would not attempt to gain customers from AKZO and Diaflex informed AKZO about ECS's quote to RHM and told AKZO that both firms would have to reduce their prices to RHM if they were to avoid losing the supply contract to ECS.

The court accepted the Commission's evidence and held that Diaflex and AKZO were in close contact regarding prices prior to the interim measures decision, and the

²⁶¹ *Ibid.*, at 287.

Commission was consequently entitled to disregard Diaflex's prices when determining whether AKZO's price reductions were in response to competitors' pricing policies. The court then examined the prices charged for benzoyl peroxide and potassium bromate to RHM by AKZO from 1981 to 1983 and found that in every instance these products were quoted at prices which exceeded AVC yet were below AC. In one instance the price charged by AKZO was found to be in response to a quotation by an independent firm other than Diaflex. However, the court held that AKZO could not rely on this instance because it maintained its prices at the low level up until the interim decision despite not having to face subsequent independent competing offers. On the basis of this evidence the court concluded that AKZO had maintained "prices below its average total costs over a prolonged period, without any objective justification . . . [and] was thus able to damage ECS by dissuading it from making inroads into its customers."²⁶² An equivalent conclusion was reached with regard to a number of products sold to Spillers from late 1980 until the interim decision in 1983.

As a result of these findings, the court upheld the Commission's decision insofar as it related to the allegations involving predatory pricing. The court rejected one finding of the Commission involving alleged price discrimination and as a consequence determined that the fine be reduced to 7.5 million ECU.

(d) Opinion of the Advocate General

The Opinion of the Advocate General, written by Lenz A.G., was issued on 19 April 1989. Lenz A.G. began by examining AKZO's claims that the Commission erroneously defined the relevant market as that for organic peroxides. After outlining the arguments of both parties, Lenz A.G. cited *Hoffmann-La Roche* for the principle that "the concept of the relevant market implies the possibility of effective competition among the products in that market, so that there must be an adequate degree of interchangeability among all those products in relation to a particular application."²⁶³ Lenz A.G. then rejected the Commission's finding that the market for organic peroxides

²⁶² *Ibid.*, at 291-292.

²⁶³ *Ibid.*, at 240.

was the relevant market. It was stated that the Commission had failed “to have adequate regard for this principle when it states that it is irrelevant whether one organic peroxide is a substitute for another”²⁶⁴ and because there existed a lack of substitutability, the relevant market could not be considered to be that for organic peroxides.

The Commission alternatively submitted that the relevant market was that for flour additives in the United Kingdom and Ireland. It justified this submission on the basis that customers preferred to acquire the full range of flour additives from a single source. Thus, it was claimed that these additives constituted a uniform market on the basis of their complementarity, despite their lack of substitutability arising from their different chemical structures. AKZO disputed this claim by arguing that each additive must be regarded as a separate market. It claimed that the Commission had erroneously included mills and bakers, who constituted different buyers, in the same market when, in fact, these buyers acquired different products for different reasons. The Commission responded by arguing that the purpose for which a range of products are acquired is irrelevant if it can be shown that customers consider the products complements and prefer to acquire the products from a single source.

Although acknowledging that the various flour additives are undoubtedly not substitutes because of their different chemical and structural compositions, Lenz A.G. nevertheless concurred with the Commission’s opinion. This conclusion was justified on the basis that some or all of the products were offered as a package, the products were sometimes offered and sold in the form of a mixture and, decisively, that demand from customers almost always related to several of the products. AKZO’s argument concerning the different customers was held to be irrelevant since both types of customer were closely linked and therefore they did not create fundamentally different conditions of competition. The geographical aspect of the relevant market was accepted without dispute.

Lenz A.G. then examined the issue of whether AKZO could be said to have held a dominant position within the UK and Ireland flour additives market during the

²⁶⁴ Ibid.

relevant period. Each factor provided by the Commission as evidence of AKZO's dominant position in the relevant market was examined individually in the Opinion beginning with the Commission's assessment of AKZO's market share. Lenz A.G. observed that, in its decision, the Commission relied upon an estimate by AKZO of its market share for bleaching agents in the UK which attributed a 52% share to AKZO, 35% to ECS and 13% to Diaflex. Given that the relevant market was that for flour additives in the UK and Ireland, not bleaching agents, Lenz A.G. concluded that the market share figures used by the Commission to support its finding of dominance were tenuous:

[T]he defendant's assertion that the applicant is the biggest supplier of flour additives in the United Kingdom and Ireland—to which should be added: 'during the relevant period . . . —is based on an estimate made by the applicant relating solely to 1982, solely to one group of products, namely bleaching agents, and solely to the United Kingdom.

Unsurprisingly, Lenz A.G. concluded that this evidence failed to provide a reliable picture of AKZO's share of the relevant market and therefore must be rejected as contributory evidence of AKZO's alleged dominant position.

As to the remaining seven factors which the Commission submitted as contributory evidence of AKZO's dominant position, only two—relating to AKZO's privileged position regarding access to raw materials and its superior financial resources—were upheld in the Opinion. The other five factors were rejected as proof of dominance for the following reasons: the Commission accepted its first factor was factually incorrect; none of the four documents tendered by the Commission as proof that AKZO influenced Diaflex's prices were accepted as irrefutable proof of such a relationship; to disregard suppliers offering less than the full range of flour additives would arbitrarily restrict the market situation and therefore AKZO's extensive range could not alone be considered evidence of dominance; and in relation to the final two factors, although evidence submitted by the Commission may have shown that AKZO was in a position to influence market prices before the disputed events occurred, subsequent events showed that such a position of price-leadership was not held by AKZO during the period relevant to the dispute.

Thus, having rejected almost every factor presented by the Commission to support its assertion that AKZO held a dominant position in the relevant market, Lenz A.G. concluded that no such dominant position was proved. To further support this conclusion, Lenz A.G. observed that barriers to entry were not high because no special knowledge or large investment was required to produce flour additives and that suppliers were faced by concentrated demand thereby reducing the degree of independence which they could exercise towards their customers.

As a consequence of finding that AKZO did not hold a dominant position in the relevant market, Lenz A.G. recommended that the court find for the applicant and reject the Commission's claims. In the event that the court found that AKZO held a dominant position in the relevant market, Lenz A.G. considered it necessary to provide some supplementary observations on other aspects of the case.

The first issue examined involved the allegedly abusive threats made to ECS during the two meetings in 1979. After reviewing the evidence submitted by the Commission to support its claim that AKZO threatened ECS, Lenz A.G. concluded that it was proven that AKZO had decided to terminate its collaboration with ECS in respect of the assistory deliveries and that, although it was unclear whether any threat was issued or intended during the meetings, by the end of these meetings both ECS and a senior AKZO sales manager knew of, and had planned, the threatened action, respectively. As to whether predatory pricing constitutes an abuse within the meaning of Art. 86, Lenz A.G. observed that:²⁶⁵

Since . . . according to . . . CONTINENTAL CAN not only behaviour which may cause direct damage to consumers but also behaviour which attacks the structure of the competition actually in existence must be regarded as abusive, I have no doubt that a policy of elimination, pursued by means of low, or loss-making, cut-throat prices may come within Article 86 EEC.

Surprisingly, Lenz A.G. then opined that threats of predation also constituted a breach of Art. 86:²⁶⁶

If the abuse consists in the restriction of the freedom of other undertakings to compete, the threat of economic disadvantages may in itself suffice for the finding of an infringement of Article 86. There is an infringement if, from its own experience or the experience of others, the competitor

²⁶⁵ *Ibid.*, at 255 (emphasis in original).

²⁶⁶ *Ibid.*

or trading partner threatened must expect that the dominant undertaking will follow up its words with deeds. Since the restriction of the free will of another undertaking is, merely considered as such, abusive, it is irrelevant whether that undertaking resists or yields to the pressure exerted on it. It is also irrelevant whether the dominant undertaking implements the measures threatened or refrains from doing so.

On the basis of this opinion, Lenz A.G. held that AKZO's threats would constitute a breach of Art. 86.

Having already concluded that predatory pricing could be abusive in principle, Lenz A.G. then examined the facts of AKZO's allegedly abusive pricing behaviour. Lenz A.G. concluded that the Commission, in essentially restricting its investigation of costs and prices to AKZO, had failed to conduct a sufficiently thorough evaluation of the price structure of the market. In particular, Lenz A.G. stated that in order to obtain a reliable assessment of an economically justifiable price the Commission should have both examined the cost structures of the other two important suppliers, ECS and Diaflex, and had regard to the production capacity of the major participants in the market. In light of this inadequate investigation, Lenz A.G. concluded that:²⁶⁷

[T]he Court will be unable to arrive at any view with regard to the question of prices that were economically justifiable or reasonable. It must therefore treat all passages in the defendant's final decision in which prices are mentioned as being too high or too low as not having been written.

As a result of this conclusion, no opinion was provided by Lenz A.G. in respect of the Commission's finding that AKZO had breached Art. 86 by engaging in the conduct specified in point (ii) of Article 1. For the same reason, no opinion was given in respect of point (v) of Article 1.

Finally, Lenz A.G. considered the issue of whether AKZO's behaviour in general was engaged in with the purpose of damaging ECS's business or securing its withdrawal from the EEC organic peroxides market. Lenz A.G. had already concluded that AKZO held this intention immediately after the meetings between ECS and AKZO held in late 1979, but it was necessary to examine whether AKZO's conduct after the High Court settlement continued to evidence such an intention because this was the period relevant to the current allegations. The Commission relied upon statements in

²⁶⁷ *Ibid.*, at 237.

two internal documents written by AKZO employees and AKZO's 1980 and 1981 annual reports to justify its conclusion that AKZO continued to hold the relevant intention after 1980. None of these documents directly referred to any intention to damage ECS or induce its exit from the organic peroxides market. Rather, the Commission inferred such an intent from statements which, as the Opinion noted, were essentially descriptions of the market situation. These statements mentioned, *inter alia*, the number of customers lost by ECS and the decline of its profitability compared to AKZO, the desire of AKZO's to continue to seek the Allied Mills' supply contract, the ability of AKZO to retain its market share despite strong competitive pressures from ECS and other competitors and an intention to react in a strong competitive manner in the event of intensified competition. Thus, no unambiguous evidence was submitted by the Commission which proved that AKZO continued to hold the same intent towards ECS after the High Court settlement as it had held previously. Moreover, AKZO's behaviour was consistent with intentions other than that imputed to it by the Commission. This observation led Lenz A.G. to conclude that "it is not proved with a sufficient degree of certainty that the intention originally harboured in 1979 to damage ECS and to drive it out of the plastics market subsisted throughout the period in question."²⁶⁸

Having rejected all allegations relating to predatory pricing with the exception of the threats made by AKZO to ECS, Lenz A.G. recommended that if the court found AKZO held a dominant position within the relevant market the fine should be reduced to 500,000 ECU's.

(e) Analysis of the Decision

AKZO presented the European Court of Justice with an opportunity to stipulate clear and definitive standards for acceptable minimum pricing behaviour in the EEC. The court was in the enviable judicial position of having a great wealth of relevant literature at its disposal, primarily sourced from over ten years of continual United States judicial and academic commentary on predatory pricing. This provided the court

²⁶⁸ *Ibid.*, at 265.

with a range of widely debated standards—the assumptions, logic, advantages and limitations of which were common knowledge—that could be evaluated for their suitability to the EEC competition environment and, if appropriate, implemented immediately. Despite this potential, however, the opportunity was not accepted and the ultimate decision proved unsatisfying. The judgment lacked any rigorous analysis of the relative advantages and disadvantages of different standards for identifying predation and the standard prescribed was inadequately justified. Furthermore, after completely ignoring the concerns raised by the Commission relating to the appropriateness of cost based tests under EEC competition law, the court then proceeded to institute a cost based standard of its own.

These concerns are expanded upon in this subsection beginning with a critique of the court's factual analysis. Although the court's reasoning and conclusions are generally convincing and well-founded, particular concerns may be raised regarding the court's logic in defining the relevant market. The importance of this issue to the case is apparent when it is recognised that it was this issue on which *Lenz A.G.* and the court disagreed and it was this disagreement which ultimately led the Advocate General to recommend that the case be annulled, while the court imposed a fine of 7.5 million ECU upon *AKZO*. Whether the court would have followed the remainder of Advocate General's opinion if it had concurred with *Lenz A.G.* and found that the relevant market was that for flour additives in the UK and Ireland rather than organic peroxides in the EEC may only be speculated upon.

The second part of this subsection focuses on the legal implications of the *AKZO* decision for predatory pricing adjudication in the EEC. The court's standard of illegality is substantially different from that adopted by the United States Supreme Court in *Brooke Group*. However, the reason behind this divergence is not immediately obvious. The discussion examines whether the different EEC standard is justified by disparate policy concerns or is simply reflective of a failure by the Court of Justice to assimilate the logic underlying contemporary standards of predatory pricing. Although it is concluded that the policy objectives of EEC competition law justify the result that a requirement of recoupment is not included in the court's standard, when the actual

standard prescribed is examined in light of these objectives, questions may be raised as to its appropriateness.

The Logic Underlying the Court's Decision

AKZO raised two general objections to the Commission's submission that the European market for organic peroxides constituted the relevant market. The first—that the allegedly abusive behaviour occurred in the flour additives market rather than the organic peroxides market—was rejected by both the court and the Advocate General as being irrelevant in principle. Both held that Art. 86 proscribed the situation where a firm, dominant in one market, abused this dominance in another market. However, the second argument—that organic peroxides were not substitutes—divided the court and Lenz A.G. and as a consequence rendered the Advocate General's primary recommendation redundant.²⁶⁹

The relevant market is defined through the application of the concepts of demand and supply substitution. The concept of demand substitution involves an inquiry into which products are sufficiently similar in terms of function, attributes and price that they may be reasonably considered substitutes for a particular purpose. In contrast, evaluating supply substitutability involves asking what alternative actual and potential sources of production exist which could readily supply the demand substitutable products. For both concepts, the boundaries of what constitutes a substitute is a matter of degree. In some cases, the qualities of a product or the method of production will be so distinct that it will be apparent where the line should be drawn; in other cases, many similar products may serve the same purpose or the production techniques for each may essentially be the same so that the boundaries of the relevant

²⁶⁹ Lenz A.G. and the court were also divided on the issue of abuse. Lenz A.G. held that Commission's evidence was insufficient to support its conclusion that AKZO's prices were not economically justifiable or reasonable because it had failed to identify and analyse the prices and cost structure of ECS and Diaflex and because it did not investigate the capacity utilisation of the three major producers (*ibid.*, at 237). By employing a cost-based standard where only the alleged predator's prices and costs are relevant, the court rendered the concerns of Lenz A.G. regarding the costs and prices of ECS and Diaflex irrelevant. However, it should be noted that the court's standard is closely related to the A-T standard and the second tier of the J-K standard. Both of these standards hold that under conditions of excess industry capacity, pricing between AVC and AC should be considered legal where the excess capacity is a result of a decline in demand or new entry (Joskow & Klevorick, *supra* note 4, at 253; Areeda & Hovenkamp, *supra* note 210, at 654-655). Therefore, Lenz A.G.'s concern that the Commission should have investigated the production capacity of the industry is warranted and is also a deficiency of the court's decision.

market will fall within some shade of grey. Until the relevant market is defined, however, the process of evaluating the conduct cannot continue and therefore, in those circumstances where delineating the bounds of the relevant market is difficult, a subjective decision will simply have to be made.

As noted, the AKZO argued that the organic peroxides market could not constitute a single market on the basis of either substitutability or complementarity.²⁷⁰ They could not be substitutes because organic peroxides are not interchangeable for many uses, nor could they be considered to be a single package of complementary products because customers do not acquire all organic peroxides together nor satisfy all their needs for organic peroxides from the same supplier. The court responded to these arguments by addressing a different yet related question. Instead of considering whether organic peroxides were substitutes for each other, the court examined whether any other products could reasonably be considered substitutes for organic peroxides and, finding a lack of such substitutes, held for the Commission on this issue.²⁷¹ Underlying the difference between these questions is simply a question of degree. Whereas the court considered the concept of demand substitutability from the perspective that “various operations in the plastics industry” constituted the use by which products are assessed to determine their substitutability, AKZO adopted a lower level perspective and examined demand substitutability by employing specific operations within the plastics industry as the application benchmark.

It is submitted that the latter benchmark was the correct criterion for defining the relevant market in *AKZO*. The concept of product substitutability should be—and is

²⁷⁰ An equivalent argument was made by AKZO before both the Commission and the court in relation to the market for flour additives. This argument was rightly rejected by the Commission and Lenz A.G. on the grounds that the evidence indicated that demand related to flour additives as a group and thus these products were complements and were acquired as a package (see, *Engineering and Chemical Supplies v. AKZO Chemie BV*, *supra* note 247, at 315; *AKZO Chemie BV v. E.C. Commission*, *supra* note 248, at 241). Moreover, the claim that different concentrations of benzoyl peroxide or potassium bromate should constitute individual markets is similarly unfounded since it was found that a smaller amount of a high concentration could be substituted for a greater amount of a lower concentration. In this sense, different concentrations constituted substitutes (see, *ibid.*).

²⁷¹ The court also considered that the fact that AKZO calculated a market share figure in relation to organic peroxides as a product group was evidence in support that this was the relevant market. As Waelbroeck notes, however, “the fact that a firm refers to several products as part of a single business and calculates its share of the total business evidently does not mean that it thereby acknowledges that such a business constitutes a single market for antitrust purposes.” (Waelbroeck, M., “Bi-annual Review of EEC Competition Cases 1989-1991.” In Hawk, B. (ed.), *Annual Proceedings of the Fordham Corporate Law Institute*, New York: Transnational Juris Publications, 1992, 111-138, at 117.)

usually—assessed with reference to a particular or specific purpose for which it is employed. In fact the court has itself recognised the need for such specificity. In *Hoffman–La Roche* it stated:²⁷²

If a product could be used for different purposes and if these different uses are in accordance with economic needs, which are themselves also different, there are good grounds for accepting that this product may, according to the circumstances, belong to separate markets which may present specific features which differ from the standpoint both of the structure and of the conditions of competition. . . . The concept of the relevant market in fact implies that there can be effective competition between the products which form part of it and this presupposes that there is a sufficient degree of interchangeability between all the products forming part of the same market insofar as a *specific* use of such products is concerned.

Of course, the word “specific” is a relative term. However, in the context of the previous quotation, it refers to a single application rather than multiple applications which may be conveniently labelled under some generic term. Thus, in *Hoffman–La Roche* the court considered that the same vitamins which were supplied for both bio-nutritive purposes and industrial purposes should be divided into separate markets. In *AKZO*, while over 90% of organic peroxides were consumed in three main applications within the plastics industry, each application utilised particular organic peroxides which, according to AKZO, had a “manifest absence of interchangeability.”²⁷³ Therefore, the conclusion by Lenz A.G. that there is no “adequate justification for the assertion that the organic peroxides market is the relevant market . . .”²⁷⁴ appears to be justified. Similarly, AKZO’s claim that organic peroxides could not constitute a single market on the basis of complementarity seems well-founded. All organic peroxides are not complementary raw materials in each of the three major applications and therefore these products cannot constitute a distinct product by virtue of the fact that they are always acquired as a single package.

The Implications of AKZO for EEC Predatory Pricing Law

The standard for identifying predatory pricing provided by the Court of Justice must be viewed in light of Art. 86. In turn, Art. 86 and the other articles pertaining to competition law must be considered in the context of the objectives of the *Treaty of*

²⁷² *Hoffman–La Roche v. E.C. Commission* [1979] 3 C.M.L.R. 211 at 272 (emphasis added).

²⁷³ *AKZO Chemie BV v. E.C. Commission*, *supra* note 248, at 277.

²⁷⁴ *Ibid.*, at 240.

Rome as stipulated in Art. 2 and, in relation to competition, Art. 3(f). A comparison between these objectives and the court's standard raises two issues which are relevant to EEC predatory pricing law. The first concerns the EEC and the US standards of illegality for predatory pricing and whether there exist any legitimate grounds for the recoupment standard to be employed in the EEC. The second concerns the conflict between the court's standard and that advocated by Commission and whether the court was justified in rejecting the Commission's standard and adopting a more rigid test. Both these issues will now be examined.

Brooke Group established that predation will be only condemned in the US under federal antitrust laws where the dual prerequisites of recoupment and below-cost pricing exist. When compared to the standard established in *AKZO*, the obvious difference is the factor of recoupment. This difference is a direct manifestation of the differing policy objectives which underpin US and EEC competition law and which guide the application of §2 of the *Sherman Act* and Art. 86 of the *Treaty of Rome*. The underlying premise of US antitrust policy is the protection of competition—competition being virtually always narrowly interpreted as purely an economic concept concerned with efficiency. As a result, the requirement of recoupment is necessary to ensure that only behaviour which will harm competition is proscribed. As the Supreme Court explained in *Brooke Group*, without recoupment, “predatory pricing produces lower aggregate prices in the market, and consumer welfare is enhanced . . . [and therefore] predatory pricing is in general a boon to consumers.”²⁷⁵

The recoupment test could not be justified in the EEC. The theoretical basis for this test rests on the premise that consumer welfare is the unitary policy consideration; the EEC has, however, a multiplicity of objectives. The recoupment test would not have direct regard to either the primary goal of integration or the objective of maintaining fairness in market transactions. The test would also fail to promote the EEC's economic objectives since distributive concerns are explicitly acknowledged in the competition provisions of the *Treaty of Rome* as being important. In the past, the co-existence of

²⁷⁵ *Brooke Group*, *supra* note 1, at 70,383.

these social and economic objectives has intentionally resulted in the application of Art. 86 for the protection of resellers and individual competitors at the expense of efficiencies.²⁷⁶ This result may be directly contrasted with the famous dicta of the Supreme Court in *Brown Shoe*²⁷⁷ where it stated that the antitrust laws were passed for “the protection of competition, not competitors.”²⁷⁸ That the recoupment test would not adequately consider the multiple objectives of EEC competition law would not be of concern if these social and expanded economic objectives were unharmed by predatory pricing. However, it has already been shown that predation is contrary to the existence of a wide range of social and economic concerns, many of which are pertinent to the goals of the *Treaty of Rome*.²⁷⁹ For this reason the Court of Justice in *AKZO* cannot be criticised for declining [neglecting?] to incorporate a requirement of actual or likely recoupment within their standard for predatory pricing.

Although the objectives underpinning EEC competition law preclude the use of a recoupment test, this does not imply that the standard established in *AKZO* is compatible with these objectives. In order to conclude whether such congruency exists, an assessment of the efficacy of the standard in identifying all types of predatory pricing whose consequences are contrary to the objectives of EEC competition law is required. By focusing on the conflicting standards provided by the Commission and the court, the following discussion indicates that the court’s standard may be too permissive and thereby liable to condone instances of predation which, if successful, would be detrimental to a range of objectives of EEC competition law.

The Commission emphatically rejected the proposition that a cost-based test was an appropriate standard under Art. 86 for three reasons. First, it was argued that *AKZO*’s proposed AVC standard was “based on a static and short-term conception of ‘efficiency’ [which] takes no account of the broad objectives of EEC competition rules set out in Art. 3(f) and particularly the need to guard against the impairment of an

²⁷⁶ Hawk, *supra* note 243, at 748.

²⁷⁷ *Brown Shoe Co. v. United States* 370 U.S. 294 (1962).

²⁷⁸ *Ibid.*, at 320.

²⁷⁹ See part II, chapter A, *supra*.

effective structure of competition in the Common Market.”²⁸⁰ Secondly, the Commission echoed the arguments of Williamson, Scherer, and others who criticised the A–T standard for its inability to effectively condemn strategic predatory behaviour. Finally, the Commission observed that AKZO’s AVC standard would not successfully allow pricing to a level which only excluded less efficient competitors, because more efficient competitors could be eliminated by a dominant firm with greater financial resources pricing between AVC and AC.

As noted previously, the Commission went on to acknowledge that cost tests may make a valuable contribution to any assessment of an allegation of abusive pricing by helping establish the reasonableness and underlying purpose of the behaviour. Furthermore, evidence of intent was suggested as a requirement in ambiguous cases where low pricing could equally be explained by legitimate or abusive purposes. Subjective evidence was identified as the primary means by which the intent of the alleged predator would be determined, although in absence of such evidence, the Commission held that “an exclusionary intention could [also] be inferred from all the circumstances of the case.”²⁸¹

Despite its discussion of the applicability of cost-based tests as a standard of illegality under Art. 86, the Commission failed to provide a clear standard of its own and apparently concluded that AKZO’s pricing behaviour constituted a breach of Art. 86 by relying principally on subjective evidence of intent. This lack of specificity and reliance upon subjective intent attracted strong criticism from a number of commentators who claimed that the decision would provide little or no predictability or certainty to business and that a cost-based standard should have been instituted.²⁸² Nevertheless, it is evident that the Commission rejected cost-based tests as the sole

²⁸⁰ *Engineering and Chemical Supplies v. AKZO Chemie BV*, *supra* note 247, at 307 (emphasis excluded).

²⁸¹ *Ibid.*, at 309.

²⁸² Ehr, T.G., “The European Commission’s ECS/AKZO Standard for Predatory Pricing in the E.E.C.: Deterrence or Disorder?” *Georgia Journal of International and Comparative Law*, 17, 1986, 271–302; Merkin, R., “Predatory Pricing or Competitive Pricing: Establishing the Truth in English and EEC Law.” *Oxford Journal of Legal Studies*, 7, 1987, 182–214; Martinez, L.M.H., “Predatory Pricing Literature Under European Competition Law: The AKZO Case.” *Legal Issues of European Integration*, 1992/1993, 95–128, at 109–110; Levy, N., “Case Notes: AKZO Chemie BV v. Commission.” *Common Market Law Review*, 29(2), 1992, 415–427, at 427.

determinant of legality for low pricing under Art. 86 and that the multiplicity of policy objectives guiding EEC competition law was a primary reason for this decision.

The court refused to elevate the element of intent to the same heights of importance as had the Commission. Instead it preferred to establish an objective foundation for its standard through the use of an AVC test and to use intent—specifically, evidence showing that prices were “part of a plan for eliminating a competitor”—to condemn pricing behaviour falling between AVC and AC. It would seem that the court’s concept of intent should be considered in an objective sense. Martinez presents a persuasive argument that the court employed an objective notion of intent in order to retain consistency with the objective definition of abuse established in *Hoffman-La Roche* and relied upon by the court in *AKZO*. It is observed that on four occasions the court inferred that AKZO’s behaviour was guided by an anticompetitive intent from the lack of objective justification for the pricing behaviour engaged in. As Martinez states, documentary evidence still plays a role under an objective concept of intent.²⁸³

Documentary evidence such as internal memoranda, if available, might be useful to better understand what happens in the market (the desired effects) and to show the intent of the dominant undertaking. However, this predatory intent should be understood as the absence of any objective business justification for the dominant firm’s conduct other than the exclusion of a competitor, disregarding any considerations about the more or less aggressive style of the incumbent’s managers.

Therefore, the concept of intent used by the court should be contrasted with that used by the Commission. Whereas the court employs an objective notion of intent, the Commission relies initially upon subjective evidence of intent and only considers objective evidence when the subjective evidence is ambiguous.

The Commission’s primary reliance on subjective intent can arguably be viewed as a result of its belief that cost-based tests will not be effective in identifying all types of predation which would be detrimental to the objectives of EEC competition law. Particular issue was taken with the proposition that above-cost pricing could never be anticompetitive. Since pricing above AC will usually (if not always) have an objective

²⁸³ Martinez, *ibid.*, at 122.

justification, it is arguable that evidence of subjective intent should be employed as the initial means by which an above-cost exclusionary policy would be identified. If no such evidence exists or if it is ambiguous, then such a policy could be inferred if the objective justification of price competition was outweighed by counteracting objective evidence indicating an anticompetitive purpose.

As noted, the court sought to justify its standard by relying on elementary static microeconomics. No direct reference whatsoever was made to the Commission's argument that Art. 86 existed to uphold the objectives of the *Treaty of Rome* and that these objectives would not adequately be served by the adoption of a cost-based test as the determinative standard by which low prices would be evaluated for their legality. As a consequence of not examining this argument, the court also avoided having to address the Commission's justification for employing a subjective notion of intent as the primary standard of illegality.

Since the Commission's concerns were acknowledged but not discussed by the court, it can be inferred that the court's prescription of a cost-based test was an implicit rejection of these concerns. Assuming that this is the case, it begs the question of how the court could consider that the objectives of the *Treaty of Rome* would be upheld by their standard. There are at least three possible answers to this question. The first is that the court and the Commission differ on what are the relevant objectives. Following this argument, Martinez states that:²⁸⁴

The economic reasoning of the . . . [court] to justify the condemnation of predatory pricing as an abuse of dominant position is the elimination from the market of competitors at least as efficient as the dominant firm. . . . Clearly, what motivates the Court to establish this rule is the protection of efficiency and not the protection of the number of competitors in the market.

If this view is correct, the *AKZO* decision would represent, or at least indicate, a movement by the court to evaluate allegations of abusive behaviour by dominant firms—or possibly, for that matter, all cases brought under Articles 85 and 86—on the grounds of economic efficiency.²⁸⁵ Yet if economic efficiency is to be considered the

²⁸⁴ *Ibid.*, at 126.

²⁸⁵ Previous decisions by the court involving allegations brought under Art. 86 show that the court has not considered economic efficiency to be the sole benchmark by which such cases are decided and a range of economic, social and integration

pre-eminent or even sole objective against which allegations of predation are to be evaluated in the EEC, there would presumably be no difference between the objectives which guide EEC and US competition law. If this is true, how can the Court of Justice justify their cost-based standard in light of the current US requirement for recoupment? The recoupment test was established by the Supreme Court because of its conclusion that no cost-based test can guarantee that competition, defined in terms of allocative efficiency, will be harmed in every instance where the standard is breached. Conceivably the same logic should apply in the EEC if the objectives are equivalent with those in the U.S.

A second answer could be that the standard provided by the court was not intended to be universally applied to all future allegations of abusively low pricing but rather represented the minimum needed to assess the facts before the court. Some support for this argument may be found in the decision. The court never explicitly states that the standard prescribed is to be exhaustive nor is this effect implied within the court's statements. Rather, in stating that "[t]hese [tests] are the criteria that must be applied to the situation in the present case"²⁸⁶, the implication is that other tests may be appropriate. Furthermore, although it has been suggested that the court's rejection of the Commission's standard also constitutes a rejection of the Commission's claim that above-cost prices can be abusive,²⁸⁷ at no stage does the court explicitly—nor, it is submitted, implicitly—make such a statement.

Whilst acknowledging that the judgment can be interpreted as expressing no opinion on the legality of above-cost pricing, one commentator has argued that the court intended the *per se* legality of above-cost prices. Martinez justifies this argument on the grounds that the court condemned predatory pricing by a dominant firm in order to protect "competitors which 'might be at least as efficient as the dominant undertaking' in order to promote 'competition on the merits.'"²⁸⁸ If Martinez's

objectives have influenced the outcome of these cases. See, generally, Hawk, *U.S., Common Market and International Antitrust: A Comparative Guide (1990 Supp.)*, *supra* note 243, at 829-832.

²⁸⁶ *AKZO Chemie BV v. E.C. Commission*, *supra* note 248, at 281.

²⁸⁷ See Waelbroeck, *supra* note 271, at 119.

²⁸⁸ Martinez, *supra* note 282, at 126. Martinez also justifies his argument on two other grounds: (i) that valid instances of above-cost predatory pricing would be extremely difficult to accurately identify and attempts to do so would deter desirable price competition and be administratively costly, especially in light of the rarity of predation and the increase in vexatious claims

argument and reasoning is correct (which is possible), then the court must be criticised for neglecting to consider the concerns of the Commission which plainly argued that pricing could be anticompetitive and contrary to the objectives of the *Treaty of Rome* despite being above cost.

The third answer could simply be that the court, in neglecting to closely evaluate the relationship between their standard and the objectives of the *Treaty of Rome*, has failed to recognise that their standard may not have regard to the social objective of fairness in the market nor the overriding goal of market integration in all instances.

All these possibilities are merely speculative. What can be stated with assurance is that the court's standard was accompanied by an inadequate level of analysis, reasoning and justification. Consequently, too many questions remain unanswered. As the previous discussion illustrates, attempts to infer the court's opinion on issues such as the relevant objectives guiding Art. 86 and whether above-cost pricing can ever be an abuse only lead to inconsistent logic and further questions. Yet answers to these issues are relevant to the case, are necessary to evaluate the underlying logic of the court's standard and are essential to undertakings whose actions will be guided by the standards established. The decision must therefore be strongly criticised for the lack of certainty and predictability which it provides.

which the rule would promote (*ibid.*); and (ii) that if predatory pricing is defined as "selective tactics used by firms with high market shares against much smaller rivals" then such conduct, where above-cost, will be able to be condemned as price discrimination resulting in primary line injury (*ibid.*). The first argument is difficult to dispute because the incidence of predation, the ability of judiciaries to accurately and consistently apply standards, and the degree of deterrence which proscription of above-cost predatory pricing would provide, are all empirical questions which cannot be solved with current technology (see, generally, part III, chapter A, *supra*). Therefore, any recommendations which are grounded on these arguments necessarily involve the advocate's subjective assessment of the importance of these issues. The second argument is invalid. The requirement of selectivity was included by Shepherd in his definition of predation after hypothesising that firms would employ the least expensive methods to gain market share and deducing that the least expensive methods were those involving selective actions against specific competitors (Shepherd, W.G., "Assessing 'Predatory' Actions by Market Shares and Selectivity," *Antitrust Bulletin*, 31(1), 1986, 1-28, at 4-13). However, this logic is questionable. Shepherd neglects to observe that price discrimination is more easily detected than predatory pricing and for this reason instances of predation may be more likely to involve uniform price cuts. Furthermore, predation involving selective price cuts would only be effective where arbitrage was not possible. Shepherd's concept of selectivity is also invalid because of its lack of sensitivity to entry deterring behaviour such as limit pricing or reputation-building which require uniform action in a market to be profitable.

Game Theory and the AKZO Decision

The Commission's decision in *AKZO* and its arguments before the Court of Justice on the appropriateness of cost-based tests as the determinative standard for identifying predation under Art. 86 indicate the important role which game-theoretic predation models may play in the future of EEC predatory pricing litigation. After arguing that cost-based tests would fail to take account of strategic price-cutting, the Commission stated that:

The important element is the rival's assessment of the aggressor's determination to frustrate its expectations, for example as to rate of growth or attainable profit margins, rather than whether or not the dominant firm covers its own costs.

The "important element" mentioned can only relate to whether a threat of predation is credible which is, of course, one crucial factor determining the success of reputation and signalling predation.²⁸⁹ Furthermore, the Commission's statement that the costs of the alleged predator are irrelevant to whether a pricing policy is predatory or otherwise reflects the conclusions of Deep Pocket and reputation theories of predation.²⁹⁰ Thus, the Commission is clearly amenable to the logic of game-theoretic predatory pricing models and, given its standard is established on the basis of subjective intent, appears willing to attempt to condemn such strategic pricing despite the numerous difficulties involved in accurately identifying such pricing.²⁹¹

Whereas the Commission referred to strategic pricing to justify their conclusion that above-cost pricing could be anticompetitive, the court's silence on the issue of these costs circumvented the need to express an opinion on game-theoretic models. In contrast, one comment by Lenz A.G. indicates that he may regard such models with favour. Neither the Commission nor the court explicitly held that threats could ever be, by themselves, infringements of Art. 86. However, Lenz A.G. opined that this could be the case where the threatened competitor expected that the aggressor would act on their threats. It was further argued that where such a belief was held by the threatened party, their free will had been restricted and this constituted the abuse. Therefore, whether the

²⁸⁹ See part II, chapter B, section 3, subsection (b) & (c), *supra*.

²⁹⁰ See specifically, part II, chapter B, section 3, subsections (a) & (b) and generally, chapter C, sections 2 & 3, *supra*.

²⁹¹ See generally, part II, chapter C, *supra*.

threatened party actually yielded to the pressure and whether the aggressor actually acted on their threats would be irrelevant.

The opinion expressed by Lenz A.G. ventures into unexplored territory. Although the game-theoretic reputational and signalling models of predation prove that credible threats can be detrimental to competition, extreme difficulties exist in accurately identifying such instances of anticompetitive behaviour.²⁹² Lenz A.G. does not attempt to provide solutions to these problems and in fact, if considered in light of the reputational predation theories, his opinion is illogical in one respect. Lenz A.G. states that an abuse would still exist irrespective of whether the threatened party conceded or whether the aggressor actually engaged in the threatened behaviour. However, reputational predation models rely on the threat being credible, and where the prey does not take heed of the threats, this credibility is only maintained by the aggressor actually engaging in predation. If the aggressor does not prey in such instances, its reputation is lost forever. Thus, to the extent that Lenz A.G.'s opinion is derived from reputational predation theories, it is invalid in holding that a threat will be abusive where the prey enters and the predator does not engage in predatory pricing.

It must be noted that this criticism solely refers to the concept of detriment involved within reputational models of predatory pricing. Such models are extreme abstractions of reality and, in general, they consider that society is being harmed where entry is deterred. However, as has been shown, other objectives are relevant to EEC competition law and if Lenz A.G. considered that these other objectives would be harmed by the abusive "restriction of freedom" involved with threats, then it may be entirely irrelevant that the threats were not carried out or that the threatened party did not yield.

Neither the Commission's statements on above-cost pricing nor Lenz A.G.'s opinion regarding the abusiveness of threats are discussed in detail and in some senses they do not appear to be robust. Nevertheless, they indicate that game-theoretic

²⁹² For a review of the efficacy of a range of proposed tests in identifying reputational and signalling models of predation, see part II, chapter C, *supra*.

predation models may be extending beyond the bounds of theory and encroaching into the realm of enforcement practice. It will be interesting to see how influential these pronouncements become, whether and in what manner they are developed, and in particular, whether the Commission examines future predatory pricing cases with the same degree of enthusiasm for game-theoretic predation models as it exhibited in *AKZO*.

Finally, it must be mentioned that the facts of *AKZO* have been analysed by Philips and Moras with reference to certain prerequisites for rational reputational predation.²⁹³ After stipulating that rational predation requires, *inter alia*, that the alleged predator be a multimarket firm and that it “attacks after entry had occurred in one of its markets”, it was found that the facts did not support the existence of the second prerequisite. It was stated that ECS actually initiated the price-cutting episode and that—assuming that ECS was sufficiently more cost efficient than *AKZO* to become the price leader—“*AKZO*’s ‘counter-attack’ (around December 1980) appears as the reaction of a dominant firm that lost its price leadership and tries to discipline a deviant.”²⁹⁴ Philips and Moras concluded that:²⁹⁵

[I]t is clear to us that the UK flour additives market moved from a price leadership situation towards a more competitive one as a result of the initial low price quotations by ECS . . . The story told is one of active competition, initiated by ECS.

The analysis and conclusion provided by Philips and Moras highlights the limits of game-theoretic models with respect to the adjudication of actual predation allegations. The conclusion of these commentators, while it may be entirely correct, was obtained because the facts apparently did not comply with a prerequisite of rational predation.²⁹⁶ However, it should be noted that this prerequisite is not relevant for either

²⁹³ Philips, L. & Moras, I.M., “The *AKZO* Decision: A Case of Predatory Pricing?” *Journal of Industrial Economics*, 41(3), 1993, 315-321.

²⁹⁴ *Ibid.*, at 320.

²⁹⁵ *Ibid.*, at 321.

²⁹⁶ Philips and Moras’s interpretation of some aspects of the factual evidence is open to dispute. For example, after stating that ECS initiated the price-cutting episode, they note (*ibid.*, at 319-320):

AKZO had no choice but to follow by adjusting its prices to the quotations made by ECS. In what was practically a duopoly situation—*Diaflex* did not count much—the only price it could adjust to was the competitor’s price. It is hard to understand, therefore, in what sense the Commission objects in §40 of its decision to *AKZO*’s not calculating its low prices ‘by reference to a market price or the price then being paid by the customer’.

This account of the facts neglects to recognise the Commission’s argument of the role played by *Diaflex*. The Commission and the court held that *AKZO* was matching its prices, not to ECS’s, but to those of *Diaflex* over which it had control. Thus,

Deep Pocket or signalling theories of predation. This observation simply illustrates a conclusion reached in the previous discussion on game-theoretic predation models, that being that these models have very restrictive assumptions and structural constraints which are not generally applicable. Thus, the fact that a prerequisite of one model or a class of models is not satisfied by the evidence does not mean that rational predatory pricing has not occurred or was not attempted. The rationality of predation is context specific and it would be highly unlikely that the facts of a case actually fitted within an established model. It is therefore unwise to attempt to second guess triers of fact on the basis of the restrictive models and theories which currently exist. Furthermore, it is important to reiterate that the concept of competitive harm involved with game-theoretic predation models excludes consideration of most of the concerns guiding EEC competition law. Therefore, even if the facts exactly corresponded to a robust model which proved that under these conditions predation would be an irrational strategy, this would not imply that the conduct should not be condemned.

(f) Conclusion

AKZO presented the European Court of Justice with a difficult task. As it was the first predatory pricing case litigated before both the Commission of the European Communities and the Court of Justice, there existed a huge number of issues relating to predation to be analysed and decided within the context of the European Community. Regrettably, the judgment failed to deliver answers, solutions and conclusions to many of these issues and it is therefore inherently unsatisfying. In many respects, it is difficult to agree with the ultimate decision and the standard prescribed. This is not because there exist glaring mistakes in the factual or legal conclusions provided by the court, but rather, because the judgment fails to provide the opportunity for the court's analyses to

some doubt must be cast upon Philips and Moras's conclusion if it is reliant upon their interpretation of *Diaflex's* role in the market. Furthermore, Philips and Moras concluded that *AKZO* was not engaged in rational predation because it failed to attack *ECS* after *ECS* had entered one of *AKZO's* markets. This is a question of degree because the conditions of the High Court settlement severely restricted any desire *AKZO* may have held to attack *ECS* after the settlement. It is possible that *AKZO* could only continue to carry out its threats after some provocation by *ECS* which would allow *AKZO* to retaliate within the terms of the settlement. Thus, although *ECS* may have initiated the price-cutting phase, this may have been precisely the action *AKZO* required to engage in Deep Pocket predation. It must be conceded that only possibilities are being raised. But this simply serves to illustrate that if *AKZO* engaged in predatory pricing, it need not have been purely for reputational purposes and it is not necessarily irrational.

be evaluated. The level of justification provided in the judgment is simply too superficial for any rigorous assessment of the court's logic and conclusions.

There is little excuse for the court's superficial discussion. As noted, over a decade of United States judicial and academic opinions surrounding all aspects of predatory pricing established a wellspring of relevant knowledge from which the court could drink. Whether this drink was accepted is unknown, but there is little evidence in the court's judgment which indicates that the glass was left anything but full. Furthermore, the judgment came more than two years after the opinion of the Advocate General was issued and thus the court certainly had time to consider all relevant literature. Whether it did so is indeterminable from the judgment.

Despite the brevity of the judgment, however, there are some positive aspects which deserve to be recognised. Unwittingly or otherwise, the court has not embraced the recoupment requirement which, as discussed in *Brooke Group*, has come to prominence in the United States. It is submitted that this result is entirely justified because of the different policy objectives which are relevant to EEC competition law. The recoupment test may have a deserved place in the US where competition in terms of economic efficiency is paramount, but where integration, distributive concerns and a desire for fairness in the market also impact upon the ultimate decision, the theory behind the recoupment test is invalid.

In a similar vein, the court has not pronounced any opinion on the legality of above-cost pricing. As the Commission stressed in its decision, there would appear to be valid policy grounds for not instituting a rule of *per se* legality for above-cost pricing in the EEC. While the court did not express any opinion on this matter, at least its silence maintains the possibility that above-cost predatory behaviour could still be condemned within the EEC. Of course, the other side of this silence is a lack of certainty but it should be noted that business has been living and operating within the Community for over 35 years with the same uncertainty. In not affecting the legal environment on this issue, the court is also not changing the level of uncertainty and therefore above-cost pricing behaviour is unlikely to alter as a result of the court's judgment in *AKZO*.

Arguably, the court should also be commended for the certainty provided by its standard for minimum pricing. The cost-based test established by the court provides a clarity not evident in the Commission's vague standard. This will result in more predictable and consistent decisions and greater certainty for business. However, any praise must be given cautiously for behind the facade of certainty lie some extremely important unanswered questions. In particular, and most importantly, the court failed to provide a link between its standard and the policy objectives of EEC competition law. Without such a link, there is no opportunity to evaluate the logic behind the standard and therefore there is no way knowing whether the standard will preserve and protect the relevant values and objectives. Until such a link is established by the court, the EEC predatory pricing standards will exist as laws without basis.

3 *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*

(a) Judicial Predatory Pricing Tests in Australia

Since the enactment of the *Trade Practices Act* 1974 (hereafter referred to as the “TPA”), there have been very few litigated cases involving predatory pricing in Australia. Only two cases were decided before the Full Federal Court’s 1992 decision in *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*²⁹⁷ In 1978 the Full Federal Court delivered its judgment in *Victorian Egg Marketing Board v. Parkwood Eggs Pty Ltd.*²⁹⁸ The appellants were a statutory marketing authority for eggs in Victoria who had sold eggs in the neighbouring A.C.T. market below the price of the respondents who were the major suppliers of eggs in that market. The respondents had brought an action alleging a breach of §46(1).²⁹⁹ Citing *United States v. Corn Products Refining Co.*³⁰⁰, Bowen C.J. of the Full Federal Court observed that “competition which is not intended to be permanent but is for a temporary purpose, is a hallmark of a predatory practice and distinguishes it from legitimate competition.”³⁰¹ Examining the evidence in light of this statement the court found that the Board’s pricing policy was “a temporary expedient designed to retaliate against [the respondents]”³⁰² and consequently held that the Board was contravening §46(1)(c).

No reference to any post-1975 United States authorities or literature on predatory pricing was made in the court’s decision. Bowen C.J. did, however, make the following brief comments on cost-based tests and their possible relevance to allegations of predation brought under §46:³⁰³

²⁹⁷ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3.

²⁹⁸ *Victorian Egg Marketing Board v. Parkwood Eggs Pty. Ltd.* (1978) A.T.P.R. ¶40-081.

²⁹⁹ Section 46(1) of the *Trade Practices Act* 1974 states:

A corporation that has a substantial degree of power in a market shall not take advantage of that power for the purpose of:

- (a) eliminating or substantially damaging a competitor of the corporation or of a body corporate that is related to the corporation in that or any other market;
- (b) preventing the entry of a person into that or any other market; or
- (c) deterring or preventing a person from engaging in competitive conduct in that or any other market.

³⁰⁰ *United States v. Corn Products Refining Co.* 234 F. 964 (1916).

³⁰¹ *Victorian Egg Marketing Board v. Parkwood Eggs Pty. Ltd.*, *supra* note 298, at 17,789.

³⁰² *Ibid.*, at 17,788.

³⁰³ *Ibid.*, at 17,789.

I leave open the question whether in the ordinary course a monopolist can engage in predatory price cutting only if the price is below some particular cost, and not where the price set, although it may deter competitors, is one which merely does not maximise the monopolist's profit. It may be that where one can infer the requisite purpose from other evidence, price cutting may be predatory in the sense referred to and a 'taking advantage' of power derived from the substantial control of a market, notwithstanding that it is not below marginal or average variable cost and does not result in a loss being incurred.

These comments are particularly interesting for the parallels with comments made on the issue by the court in *Eastern Express*. Both judgments express a reluctance to employ cost-based standards of illegality because of the possibility that pricing behaviour which passes such standards could still be worthy of condemnation under §46.³⁰⁴ Unfortunately there was no further discussion of the appropriateness of cost-based tests in *Victorian Egg* because, as Bowen C.J. observed, a cost test would be irrelevant in the context of the case since the Board did not price with regard to its costs.³⁰⁵ It was a statutory body which obtained its eggs by virtue of an Act and was obliged to make payments to the eggs producers from the net proceeds of sale. Moreover, the market in which the alleged proscribed conduct occurred was itself highly regulated. A quota of hens existed for the market and Parkwood held 90% of this quota. As McMahon notes, this regulation implied that it was "meaningless . . . to talk of 'legitimate competition', 'efficiency' and 'below cost pricing'".³⁰⁶

In 1980, *TPC v. CSBP & Farmers Ltd.*³⁰⁷ was decided by Fisher J. in the Federal Court. The defendants were distributors of artificial fertilisers in Western Australia and held a monopoly position in this market. A subsidy was available to importers of urea where the benefit was passed onto the farmer and no domestic producer supplied the same product at a comparable price. In September 1975, a rural cooperative contacted CSBP's suppliers and discovered that it could obtain a supply of urea from Italy at a lower price. It arranged for a shipment to be sent from Italy which it proposed to sell for \$145 per tonne in Western Australia. On 17 October CSBP announced a price reduction from \$178.80 per tonne to \$144.60 per tonne which forced the cooperative to cancel supply because it could not compete. The Trade Practices Commission

³⁰⁴ See text accompanying note 331, *infra*.

³⁰⁵ *Victorian Egg Marketing Board v. Parkwood Eggs Pty. Ltd.*, *supra* note 298, at 17,789.

³⁰⁶ McMahon, K., "Predatory Pricing Under Section 46 of the Trade Practices Act and the Decision in *Eastern Express v. General Newspapers—Part II.*" *Trade Practices Law Journal*, 1, 1993, 130-149, at 133.

³⁰⁷ *TPC v. CSBP & Farmers Ltd.* (1980) A.T.P.R. ¶40-151.

(hereafter referred to as the “TPC”) brought an action under §46 alleging that CSBP had taken advantage of its power in the Western Australian market for urea to achieve a proscribed purpose.

As with *Victorian Egg*, no reference was made to any judicial or academic literature on predatory pricing standards and very little guidance was given on the appropriate legal standard for predatory pricing in Australia. Without any reference to the legal or economics literature, Fisher J. defined predatory pricing to be the charging of an “unreasonably low price with the intent to keep RTC [the plaintiffs] out of the urea industry.”³⁰⁸ The court did not elucidate on what it meant by an “unreasonable price”. However, it was held that the alleged predatory price was not unreasonable because the time when the CSBP announced the price was not unusual, the method by which the price was set was “in accordance with the established practices of the company”³⁰⁹ and a normal profit margin was applied.³¹⁰ Thus, it may be inferred that reasonableness would be, at least in part, dependent upon objective evidence of the purpose behind the prices.

The appearance of *Eastern Express* before the Full Federal Court came at an opportune time in a number of respects. Firstly, there had yet to be any substantive discussion on the applicability of any economically-grounded standards to the Australian context. Arguably such a discussion was not appropriate in *Victorian Egg*, but there would appear to be no excuse for these issues not to have been considered in the *CSBP* case. Furthermore, while *Victorian Egg* could be distinguished on its facts, no such approach could be taken by later cases to the *CSBP* case. Therefore the economically unjustified definition of predatory pricing provided by Fisher J. in that case—specifically an “unreasonably low price with the intent” to exclude a competitor—stood as the test for whether predatory pricing would breach §46. Secondly, to the extent that it would alter assessments of predation under §46, both *Victorian Egg* and *CSBP* were decided prior to the 1986 amendments to §46 which

³⁰⁸ *Ibid.*, at 42,162.

³⁰⁹ *Ibid.*, at 42,166.

³¹⁰ *Ibid.*, at 42,167.

substituted the words “has a substantial degree of power in a market” for “be in a position substantially to control a market”. Finally, over a decade had elapsed since *CSBP* and during this time the debate on the efficacy and appropriateness of predation standards had been advanced considerably by both academics and courts.

(b) Facts of the Case

Established in 1961, the “Wentworth Courier” was a free weekly newspaper distributed in Sydney’s eastern suburbs. It was owned and published by a partnership which traded under the name of Eastern Suburbs Newspapers (hereafter referred to as “ESN”³¹¹) which also distributed two other free newspapers within other suburbs of Sydney. The Wentworth Courier was described by ESN as the “flagship of the group” because it provided a great proportion of the advertising revenue earned by ESN. Advertising was the only source of revenue for the Wentworth Courier and although attempts had been made to increase the volume of classified advertising, display advertisements constituted the predominant revenue source, most of which involved the sale of real estate.

Sydney’s eastern suburbs generally consisted of relatively expensive real estate and real-estate agents frequently advised their clients to sell via auction. The agents usually organised their clients advertising requirements and therefore had a strong influence on where any published advertisements were placed. Occasionally advertisements for real estate within the Wentworth Courier’s distribution area were placed in national newspapers, but in such cases it was general practice to also advertise in the Wentworth Courier. Local competition was provided in the form of two smaller newspapers, neither of which were free and both of which had smaller circulations than the Wentworth Courier.

The Wentworth Courier was produced entirely in black and white until 1987 when a restricted number of colour pages were introduced in some issues. Because of technical reasons colour pages could only be produced in multiples of four and usually

³¹¹ The first respondent, General Newspapers Ltd., was a shareholder of Eastern Suburbs Newspapers.

there would only be four colour pages: the front and back covers and the two inside pages of these covers.

In June 1988, discussions were held by parties not associated with the *Wentworth Courier* on the possibility of establishing a colour magazine devoted entirely to advertising real estate in the eastern suburbs. Eleven local real estate agents were contacted to assess demand and it was concluded that there was sufficient demand to justify such a publication. In particular, it was believed that the publication could provide more colour advertisements at a cheaper cost than that charged by the *Wentworth Courier*. A fundamental feature of the venture was that a number of major eastern suburbs real estate agents would become shareholders and would be contractually bound via the articles of association to place a quota of advertising in the magazine.

Upon learning of the proposed new magazine in August 1988, ESN arranged a dinner for approximately 100 local real estate agents in an attempt to undermine support for the proposed magazine. Despite extolling the virtues of the *Wentworth Courier*, the agents already connected with the proposed magazine were not dissuaded. Sometime between July and November 1988, it was decided to reject the proposed magazine in favour of producing a free weekly local newspaper called the "Eastern Express" which was to be similar to the *Wentworth Courier* but with greater editorial content. The *Eastern Express* was incorporated in November 1988 with local real estate agents owning 70% of the share capital. Each agent was obligated to purchase an annual quota of advertising calculated on the basis of what each agent had customarily placed with the *Wentworth Courier*. In the event that the quota was not filled, the shortfall plus a fine was to be paid to the *Eastern Express* and where the quota was exceeded, a bonus was provided to the agent.

With the first issue of the *Eastern Express* imminent, ESN adopted a number of measures in an attempt to undermine support for the new publication. In mid-August 1989, the *Wentworth Courier* was delivered in a waterproof wrapping. Soon afterwards a circular letter was sent to all households in the distribution area which outlined the impending publication of the *Eastern Express* and the fact that local real estate agents

were shareholders. It stated that these agents would be profiting twice from the business of their vendors and that by not advertising in the *Wentworth Courier* the vendors were running “a grave risk of not achieving the maximum return on the sale of . . . [their] property.”³¹² The circulation of the *Wentworth Courier* was increased to approximately 50,000 per week and was published twice-weekly, although the latter initiative was discontinued after only six weeks. Advertising rates were also reviewed. In December 1989, ESN offered a concession to real estate agents whereby for every two full page black and white advertisements placed at the existing rate of \$1300, a third page would be provided free. In the following month, ESN announced a general reduction in their rates for black and white advertisements. Effective from 31 January 1990, the full page rate was to be \$995 (reduced from \$1330) while the cost for a half page was to be \$500 (reduced from \$665).

ESN also published full page notices in successive issues of the *Wentworth Courier* referring to the relationship between a real estate agent and their vendor. The first notice stated that unless consent was given by the vendors, agents who held shares in a paper in which they placed advertisements for their vendor would be in breach of the Code of Ethics of the Real Estate Institute of New South Wales. The second notice made a more forceful claim that such agents may be in breach of the *Crimes (Secret Commissions) Amendment Act (NSW) 1987*. On 31 January 1990, the day before the first issue of the *Eastern Express* was to be distributed, ESN offered a new concession to real estate agents whereby for every page of black and white advertisements placed in February 1990, the agents would be able to place an equivalent number of pages per month up to January 1991 at the discounted price of \$695 per page. Excess pages were to be charged at the existing rate of \$995.

The first issue of the *Eastern Express* was distributed on 1 February 1990 with an initial circulation of 55,000 although this dropped to 43,000 by the time of the hearing. The rates charged for black and white advertisements were \$1,295 for a full

³¹² *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,291.

page and \$745 for a half page while colour advertisements sold at 2,390 per full page and \$1,750 for a half page. These charges remained constant until the hearing.

During February 1990 ESN continued to exert pressure on Eastern Express through letters, circulars and notices targeting real estate agents and its readers. These statements made numerous claims regarding the ethics of agents advertising in the Eastern Express, the relatively high advertising rates charged, and the reliability and quality of delivery. The rates for colour advertisements in the Wentworth Courier were also reduced in February to \$1,500 per full page and \$750 per half page.

ESN did not learn of the advertising quota provisions involved with the Eastern Express until May 1990. ESN immediately sent letters to all agents who were shareholders in Eastern Express informing them that ESN had obtained legal advice indicating that the provisions did not prevent these agents from advertising in the Wentworth Courier nor would they be materially financially damaged by doing so. However, aspects of this opinion were soon recanted when more detailed aspects of the provisions were learnt which proved the advice incorrect. ESN further reduced the rates for colour advertisements in early June to \$1,295 per page with the additional incentive that if advertisements were booked for three weeks or longer then no production charge would be imposed; placements less than three weeks incurred a production charge of \$270. On 13 July 1990, an executive of ESN was quoted as stating in an interview that:³¹³

[Eastern Express] is getting itself into a bind by being almost too good, producing on high quality paper. The Wentworth Courier is produced on newsprint, on fully depreciated presses and charging advertising rates which we really can't afford. But we will charge those rates simply because it's a bigger company which has a printing, magazine and distribution side. Therefore we can afford to take it on the nose.

The interviewer then asked: "What you are saying is that there's a discount war going on out in Sydney's eastern suburbs and you can last longer." The response was: "That's right".³¹⁴

³¹³ Ibid., at 40,295.

³¹⁴ Ibid.

The introduction of the Eastern Express had a dramatic impact upon the revenues of the Wentworth Courier. The twenty-three listed agents who were shareholders in the Eastern Express had placed \$3.6 million dollars worth of advertising at an average cost of \$4.30 per column centimetre in the year to 31 January 1989, and \$4.4 million dollars worth at \$4.90 per column centimetre in the year to 1990. However, during the first year of Eastern Express's operation, these agents only spent \$676,000 even though the cost had declined to an average \$3.98 per column centimetre.

The action which ultimately precipitated the court proceedings was a comparative advertising campaign brought by the Wentworth Courier in July 1990 to publicise its new colour advertising rates. The rates attributed by ESN to the Eastern Express were overstated and this error provided the Eastern Express with the grounds to initiate court proceedings. In late August, Eastern Express brought an action in the Federal Court of Australia under §52 of the TPA alleging that ESN had engaged in misleading and deceptive conduct in its comparative advertising by overstating the rates charged by Eastern Express. The error was quickly accepted by Wentworth Courier who published a correction; however, during the proceedings Eastern Express amended their statement of claim alleging that ESN had contravened §46(1)(a) of the TPA.³¹⁵ In respect of the §46 claim, Wilcox J. held that:³¹⁶

1. The relevant market was the market in which real estate agents, predominantly in the eastern suburbs, acquired services from local newspapers circulating in the eastern suburbs, such services being the publication of display advertisements for real estate.
2. ESN had a substantial degree of power in that market; but
3. ESN had not taken advantage of that power for the proscribed purpose of eliminating or substantially damaging the appellant, and that the reduced advertising rates were dictated by a perception on the part of ESN that they were necessary to defend the Wentworth Courier and ESN's commercial interests against the competition offered by the Eastern Express.

(c) Decision of the Full Federal Court

Eastern Express appealed the Federal Court decision on factual grounds. It claimed that Wilcox J. had erred in three aspects of his factual analysis and had

³¹⁵ *Eastern Express Pty Ltd. v. General Newspapers Pty. Ltd. & Ors.* (1991) A.T.P.R. ¶41-128. Cross-claims were also issued by ESN but are irrelevant for this thesis.

³¹⁶ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,288.

therefore concluded erroneously that the respondent had not taken advantage of its market power within the meaning of §46(1)(a). In their defence, the respondents disputed the finding of the trial judge relating to the relevant market and the substantial degree of market power held by them. The Full Federal Court dealt with the respondent's submissions first.

The respondents submitted that the relevant market should be defined as "the market in Sydney (not just the eastern suburbs) for advertising real estate located in the eastern suburbs of Sydney."³¹⁷ They conceded that the only relevant real estate was that located within the eastern suburbs of Sydney but argued that because potential purchasers lived outside of this geographic area the geographic boundary of the relevant market should be extended. To support this argument, the respondents provided evidence showing that real estate located within the eastern suburbs had been advertised in both Sydney and national newspapers.

The court rejected this argument and concurred with the relevant market defined by the trial judge. In justifying its finding the court stated that:³¹⁸

The adoption of the appellant's definition by his Honour carries with it a essential element that market [sic] is for the *acquisition of services* by real estate agents predominantly in the eastern suburbs from local newspapers circulating there.

The court then considered whether the respondent could be said to hold a substantial degree of power in the relevant market. After defining market power as "power which enables a corporation to behave independently of competition and of the competitive forces in a relevant market"³¹⁹, the court stated that "the primary consideration in determining market power must be taken to be whether there are barriers to entry into the relevant market."³²⁰ It was then observed that §46 requires that there must be a substantial degree of market power. "Substantial" was defined by the court to mean "a considerable or large degree"³²¹ and to be a relative concept which must be evaluated in light of the circumstances of each case.

³¹⁷ Ibid., at 40,297.

³¹⁸ Ibid., at 40,298 (emphasis in original).

³¹⁹ Ibid., at 40,300.

³²⁰ Ibid.

³²¹ Ibid.

Applying these definitions of “market power” and “substantial” to the facts before them, the court observed that the trial judge had concluded that there existed formidable barriers to entry in the relevant market in the form of:³²²

- the substantial reputation of the Wentworth Courier within the eastern suburbs community;
- significant reader loyalty;
- strong support from advertisers, especially local real estate agents;
- the vertically integrated operation of ESN (publishing, printing and distribution);
- economies of scale;
- ESN’s virtual monopoly of ‘a desired form of advertising’; and
- the ability of ESN to raise its display advertising charges up to the point where vendors would decide to dispense altogether with local advertising.

Despite the wide range of potential barriers listed by the trial judge, the court found that one critical factor had not been considered, that being countervailing power. The court observed that the Wentworth Courier was at all relevant times vulnerable to some of their customers (the real estate agents) combining and vertically integrating upwards and that this was in fact what occurred. As the facts showed, “this potentiality of the agents who were customers of ESN to remove or reduce their advertising from the Wentworth Courier, place it with a rival newspaper and thereby extinguish or diminish the revenue of ESN”³²³ constituted a very real competitive pressure upon ESN.

As a result of the incorporation of the appellants in late November 1988, the court concluded that from at least this date, ESN did not hold a substantial degree of market power in the relevant market. Whether the potentiality of agents to divert their advertising away from the Wentworth Courier operated before this date to prevent ESN from holding a substantial degree of market power was irrelevant because the price-cutting engaged in by ESN did not occur until after the date of incorporation. After this date the potentiality had turned into a reality. The entry and substantial impact of the Eastern Express constituted evidence that the barriers to entry in the relevant market were not so great as to be insurmountable. As the court concluded, “it is therefore not rational to say that new entrants were unable to enter the market and participate in it.”³²⁴

³²² *Ibid.*, at 40,301.

³²³ *Ibid.*

³²⁴ *Ibid.*, at 40,302.

Although the conclusion that ESN did not have a substantial degree of market power at the relevant time ended the appeal, the court considered that it should comment on its position had the requisite power been found to exist. It was within these comments that the court discussed issues concerning predatory pricing. The court observed that:³²⁵

His Honour pointed out . . . that predatory pricing may be established in one of a number of ways, by ‘express admission’, by inference from facts other than the extent of the price cuts themselves, or by analysis of the effect of the price cuts, giving rise to an inference as to the purpose behind their adoption.

Relying on four matters, the appellants criticised the trial judge’s finding that the evidence did not include any express admissions of a proscribed purpose. It was claimed that statements recorded in the minutes of two meetings of the “board of direction” and comments made to journalists during two separate interviews proved that ESN’s behaviour was conducted with a proscribed purpose in mind. The minutes relied upon stated:

Real estate rates will be slashed with one free page for every two pages booked.

Over twenty of the shareholders are real estate agents who used to support Wentworth Courier. All possible steps are being taken and will be taken to restrict its share of the market.

The first interview comment relied upon involved the admission by ESN executive that a price war was taking place. The second comment submitted as evidence involved the following statement made by another ESN executive:

[T]he Courier has weathered competition before and indicated the winner of the battle would be the survivor [sic.] of extended advertising rate-cutting.

The court rejected the appellants submission. Concluding that the four matters must be considered in light of the events surrounding them, it stated that:

In such a setting, we would characterise them, whether considered individually or taken collectively, at best, as relevant rather than compelling evidence upon the issue of proscribed purpose. In particular, . . . the bellicose imagery employed in both interviews is more indicative of swagger, *braggadocio* and the presentation of a ‘strong’ image to readers of the magazines in question, than of the existence of a purpose proscribed by s. 46.

The appellants made a second submission that the trial judge had erred in rejecting the claim that the nature and effect of the price cuts gave rise to an inference of

³²⁵ *Ibid.*, at 40,304.

a proscribed purpose. This conclusion was reached by the trial judge after citing United States authorities for the notion that a predatory price involved pricing below some measure of cost and then observing that even adopting the analysis of the Wentworth Courier's AVC most favourable to the appellants, the rates charged by the Wentworth Courier did not fall below this cost measure. The appellant contended before the court that the fact that Wentworth Courier's prices were not below AVC was not fatal to its claim. Counterarguing, ESN claimed that profitable prices should be *per se* legal, regardless of whether they are at a reduced level or not.

In response to these submissions, the court observed that:³²⁶

[T]he expression 'predatory pricing' is not a statutory expression in this country, nor, it would appear, in the United States. Caution is required in translating United States judgments, which place glosses upon the text of the United States antitrust laws, to the interpretation of the Australian law. Our law evinces a somewhat different approach to legislative drafting.

The court expanded upon this theme by noting the different requirements for a contravention of §2 of the *Sherman Act* compared to §46 of the TPA. It cited the United States case of *Barry Wright Corp. v. ITT Grinnell Corp.*³²⁷ which, according to the court, showed "that the United States decisions as to what is meant by 'predatory pricing' are judge made law which does not focus directly upon the specific terms of the antitrust laws"³²⁸ but rather involves an extension behind the specific terms to the underlying objectives of the United States antitrust laws. The court then observed that the Supreme Court's decision in *Cargill, Inc. v. Monfort of Colorado, Inc.*³²⁹ involved allegations that predatory pricing could potentially occur if a proposed merger was not prohibited. This illustrated to the court that "the concept of 'predatory pricing' appears in various contexts in the United States decisions, not all of which have immediate analogues in the Trade Practices law of this country."³³⁰ The court then continued:³³¹

It would be, in our view, an error to translate into the operation of s. 46 the United States decisions dealing with 'predatory pricing' at the expense of an independent examination of the Australian legislation as it applies to each case.

³²⁶ *Ibid.*, at 40,306.

³²⁷ *Barry Wright Corp. v. ITT Grinnell Corp.* 724 F.2d 227 (1st Cir. 1983).

³²⁸ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,307.

³²⁹ *Cargill, Inc. v. Monfort of Colorado Inc.* 479 U.S. 104 (1986).

³³⁰ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,307.

³³¹ *Ibid.*, at 40,307-40,308.

A fundamental issue in these cases as they occur in Australia is whether the corporation in question used its market power for a purpose proscribed by s. 46. The issue will be tried by a Judge of the Court sitting alone. It will be for the Judge to decide whether the existence of the proscribed purpose may properly be inferred, with or without the aid of other evidence, from evidence of the conduct of the corporation in relation to the prices charged. No preordained and fixed categories as to the level of pricing or economic theory or practice of costing necessarily control the drawing of that inference in any particular case. Whether the finding as to purpose which is sought against the corporation should be inferred from the evidence as to pricing must be judged by considering not only the logic of the matter. The Court must also consider whether 'general human experience' would be contradicted if the contract which occurred were unaccompanied by the purpose sought to be proved.

(d) Analysis of the Decision

The court's finding that ESN did not hold substantial market power meant that only two factual issues—market definition and market power—were decided on. As to market definition, neither the trial court nor the Full Federal Court found this issue to be decisive in the context of the case. The second factual issue, however, divided the courts and ultimately precluded the Full Federal Court from having to decide upon an appropriate Australian judicial standard for predation. The court as been criticised by some commentators for their finding on market power and these criticisms will be evaluated in the first part of this subsection.

The second part of this subsection examines the court's pronouncements on predatory pricing and the method by which such behaviour would constitute a breach of a proscribed purpose. Despite being obiter, these statements may be indicative of current Australian judicial thinking on predatory pricing and they may therefore prove instructive as to the approach which the Australian judiciary will take towards future allegations of predatory pricing brought under §46.³³² Having said this, however, it is concluded that the court's statements provide very little guidance on any of the substantive issues surrounding judicial standards for identifying predation. Moreover,

³³² The dicta of the Full Federal Court in *Eastern Express* has recently been cited by Cooper J. in the Federal Court of Australia with regard to an allegation of predatory pricing brought by the Trade Practices Commission (cited by the Full Federal Court in *TPC v. Pioneer Concrete (Qld) Pty. Ltd. & Ors.*, Full Federal Court of Australia (Queensland), unreported, QG 143/92, 5 August 1994). The TPC had brought an action seeking injunctive relief against Pioneer Concrete (Qld.) Pty. Ltd. for, *inter alia*, alleged breaches of §46 via predatory pricing. The defendants applied to the Federal Court to strike out certain paragraphs of the TPC's statement of claim. Cooper J. briefly cited the Full Federal Court's dicta in *Eastern Express* and noted that these dicta did not preclude the application of §46 to predatory pricing allegations: "[T]heir Honours did not hold that the use of pricing for a predatory purpose, or the ability to do so, was never a circumstance to which section 46 applied." It was ultimately ordered that part of the defendants application be accepted, and the TPC sought leave to appeal Cooper J.'s decision from the Full Federal Court. The appeal was, for the most, granted.

of the few statements which may indicate the court's preference for any particular standard, it is concluded that these statements are contradictory and thereby actually cloud the issue further.

The Logic Underlying the Court's Decision

The court's finding that ESN did not hold a substantial degree of power within the relevant market was justified solely on the basis of the real estate agents' countervailing power. As the court argued, "the capacity of those agents or some of them to combine and form a rival newspaper to the Wentworth Courier is an inherent element in the market forces at all relevant times."³³³ This potential was turned into reality upon the incorporation of the Eastern Express in November 1988 and the effect of this event was to reduce the revenue of the Wentworth Courier from the shareholders of the Eastern Express by 75% in the first year of the rival paper's operation. Given such a successful entry, the court concluded that "[i]t is therefore not rational to say that new entrants were unable to enter the market and participate in it."³³⁴

This conclusion has been criticised on the grounds that the court considered the entry of one competitor as proof that the acknowledged barriers to entry were ineffectual.³³⁵ Sanderson argues that the court failed to have regard to the approach suggested by the TPC in its Background Paper on §46 where it was emphasised that historical evidence of firms having entered, failed and exited a market was indicative of barriers to successful entry into that market. The relevance of this factor arises because of the trial judge's finding that there had been previous attempts by other newspapers to enter the market which had proved unsuccessful. In this context, Sanderson argued, the relevant question was not whether it was "rational to say that new entrants were able to enter the market and participate in it"³³⁶ but whether Eastern Express's entry would be successful.

³³³ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,301.

³³⁴ *Ibid.*, at 40,302.

³³⁵ Sanderson, L.R., "Cases: *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd.*" *Sydney Law Review*, 14, 1992, 378-384, at 380; McMahon, *supra* note 306, at 138-139.

³³⁶ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,302.

Although the court did not explicitly consider the history of entrants into the market, this issue may have been implicitly considered. The unique characteristic of the entry of the Eastern Express which differentiated it from prior unsuccessful attempts at entry, was that the Eastern Express was owned by a significant number of the market's consumers (i.e. the real estate agents) who were contractually obligated to acquire a substantial quantity of display advertisements from the Eastern Express. Two advantages were provided to Eastern Express by this quota arrangement. First it created a nominal advantage by essentially guaranteeing Eastern Express revenue which would have otherwise gone to the Wentworth Courier. Second, a relative advantage was provided by virtue of the fines and bonus system within the quota arrangement. In order to obtain the revenue of the Eastern Express's shareholding agents, the Wentworth Courier would be forced to offer prices which were sufficiently below those of the Eastern Express to compensate the agents for the fines which they would incur or the bonuses which they would lose from advertising in the Wentworth Courier. Therefore, the Eastern Express maintained a profit margin over the Wentworth Courier with respect to the agents which were shareholders in the Eastern Express.

Wilcox J. found the quota arrangement to be illegal under §45(2)(a)(ii) of the TPA and ordered that the offending provision within Eastern Express's articles of association be deleted. This finding was not appealed before the Full Federal Court. Despite the illegality of the quota provisions, however, Eastern Express did derive the benefit of this provision during the period up until the Federal Court litigation and this was the period when Wentworth Courier allegedly engaged in predatory pricing. Since the period when the allegedly proscribed pricing conduct occurred is the relevant time to assess the defendant's market power, the court conclusion that "because of the quota and shareholding arrangement . . . the Wentworth Courier did not enjoy a substantial degree of market power"³³⁷ is arguably justified despite the lack of an explicit examination of the history of entry in the relevant market.

³³⁷ *Ibid.*, at 40,302.

The Implications of Eastern Express for Australian Predatory Pricing Law

The court chose to confine its discussion on judicial predatory pricing standards to the appropriateness of importing United States standards into §46 of the TPA. The only reference to the vast literature on predation standards was to a limited number of United States decisions and these were only cited to justify the court's view that "[i]t would be an error . . . to translate into the operation of s. 46 the United States decisions dealing with 'predatory pricing' at the expense of an independent examination of the Australian legislation as it applies in each case."³³⁸ As McMahon argues, "[t]hese statements ignore the fact that the adherence to the statutory words of s 46 evince no closer identification of what constitutes predatory pricing than does the *Sherman Act*."³³⁹ McMahon continues by noting that:³⁴⁰

The Court made no attempt to define this conduct for the purposes of s 46; instead it rejected the considerable experience and particular insights of the United States judicial and academic writings on this matter on the largely irrelevant basis of the different procedural settings in which the issue of predatory pricing was examined in the United States.

While these United States authorities should be viewed in their proper perspective and not be adopted uncritically, it is unfortunate that the Court dismissed them as mere 'glosses' on the *Sherman Act*.

McMahon's criticism is well-founded. That predatory pricing is considered in different legislative contexts than that in which it appears in the TPA is not directly relevant to whether the standards of identification should be employed in Australia. In every United States antitrust context where predation is considered it is done because, in theory, predation would be contrary to some objective(s) which are sought to be upheld. The same logic should guide the consideration of predation in the TPA. Where the effect of predation is likely to be harmful to the goals of the TPA in general, and §46 in particular, then such behaviour should be condemned. To the extent that the goals or objectives of the United States and Australian competition legislation equate, it is entirely valid for the Australian judiciary to examine and incorporate the relevant standards and tests employed by the United States judiciary to identify predation.

³³⁸ *Ibid.*, at 40,307.

³³⁹ McMahon, *supra* note 306, at 140-141.

³⁴⁰ *Ibid.*

The court plainly regarded the wording of the proscribed purposes as the starting place for any examination of whether a pricing policy is in contravention of these purposes. While this is a correct place to start, the court would seem to confine such examinations to the words of §46(1)(a)–(c) and did not contemplate the possibility that all instances of predatory pricing may be inimical to the objectives of the section and the TPA. Where this is the case, a standard to identify predation should be developed for the advantages of certainty and consistency which it would provide. Assuming that such a standard could be developed then the court would not be justified in holding that “[n]o preordained and fixed categories as to the level of pricing or *economic theory* or practice of costing necessarily control the drawing of that inference in any particular case.”³⁴¹ It is only through the predictions provided by economic theory that such a standard could effectively operate, for economic theory defines those circumstances when predation would be harmful to the objectives of the TPA and it is only this conduct which should be condemned.

At one point, the court indicated that cost-based tests should not be the exclusive arbiter of legality for alleged predation. It stated:³⁴²

Whether the finding as to purpose which is sought against the corporation should be inferred from the evidence as to pricing must be judged by considering not only the logic of the matter. The Court must also consider whether ‘general human experience’ would be contradicted if the conduct which occurred were unaccompanied by the purpose sought to be proved.

The reference by the court to a test of “general human experience” is to be regretted. The search for appropriate objective tests for predation has been continuing since 1975 when Professors Areeda and Turner proposed their AVC test. Their primary motivation was to eliminate the subjective and vague intent-based tests operating at that time and it is submitted that the test of “general human experience” proposed by the court is even more nebulous than that of intent. Such a test would provide virtually no certainty nor would it be conducive to consistency. More importantly, there is no theory which provides any assurance that this test would promote the objectives sought to be upheld by the TPA. Conceivably the general experience by which the conduct would be

³⁴¹ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,307 (emphasis added).

³⁴² *Ibid.*, at 40,307–40,398.

assessed would be that of the judges'; yet, as already mentioned, Easterbrook has argued that "lawyers know less about the business than the people they represent . . . The judge knows even less about the business than the lawyers."³⁴³

Despite the general lack of direction provided by the court, it has been suggested by one commentator that the court was decisive in one respect, this being the rejection of subjective intent as the sole proof of a proscribed purpose. McMahon argues that:³⁴⁴

[After reviewing the evidence submitted by Eastern Express to show that ESN had admitted to the proscribed purpose the] Court determined that these admissions were not sufficient to prove the issue of predatory purpose. The probative force of the statements had to be determined with regard to the circumstances in which they were made. In this way the statements were seen to be 'at best, as relevant rather than compelling evidence upon the issue of proscribed purpose' and in this case they were more indicative of 'swagger, braggadocio' than the existence of a purpose proscribed by s 46.

This decision is therefore an important rejection of exclusive reliance upon subjective intention as proof of a proscribed purpose. The probative value of such statements will always depend on the circumstances in which they are made, but also on the particular predatory conduct under consideration. With predatory pricing, for example, subjective statements which indicate an intention to price cut are unlikely to be conclusive as to predatory intent as they are equally consistent with competitive conduct.

It is respectfully submitted that the court's statement in *Eastern Express* does not indicate a "rejection of exclusive reliance upon subjective intent as proof of a proscribed purpose."³⁴⁵ Immediately prior to concluding that the alleged admissions were "relevant rather than compelling evidence", the court stated that:³⁴⁶

[This evidence] must be considered in the light of the events which we have described in detail earlier in these reasons. In that setting, we would characterize them, whether considered individually or taken collectively, at best, as relevant rather than compelling evidence . . .

It is true that the court held that evidence of subjective intent must be viewed in light of the circumstances in which they were made, but it never explicitly rejected evidence of such intent as acting as the exclusive evidence of a proscribed purpose. Nor can such a conclusion be implied. Whilst it is correct that "subjective statements which indicate an intention to price cut . . . are equally consistent with competitive intent"³⁴⁷, the evidence of subjective intent tendered in *Eastern Express* must be contrasted with

³⁴³ Easterbrook, *supra* note 204.

³⁴⁴ McMahon, *supra* note 306, at 140 (citations omitted and emphasis added).

³⁴⁵ *Ibid.*

³⁴⁶ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,305.

³⁴⁷ McMahon, *supra* note 306, at 140.

the evidence submitted in both *Brooke Group* and *AKZO* which consisted of detailed plans and strategies to exclude or deter a competitor. It would be difficult to claim that such evidence was not indicative of a predatory purpose and because there was no explicit statement to the contrary, it is conceivable that the court in *Eastern Express* could have treated such evidence as being conclusive of a proscribed purpose.

(e) Conclusion

Prior to the *Eastern Express* case, Australian judicial analysis of predatory pricing allegations paralleled the situation which existed in the United States before the publication of the A–T test. Neither *Victorian Egg* nor *CSBP* had produced an objective standard of legality, and evidence of subjective intent played the primary role in deciding whether any allegedly predatory pricing behaviour breached the proscribed purposes in §46. The arrival of *Eastern Express* before Wilcox J. in the Federal Court heralded the consideration of objective tests for predatory pricing in Australia. His Honour plainly considered that cost–based tests would be worthy of importation into the Australian competition law arena, although the facts of the case precluded him from needing to express any preference over the appropriate form of the test. The appeal to the Full Federal Court was notable for the restraint placed upon the trial judge’s enthusiasm for cost–based tests. While the judgment of Wilcox J. could be seen to have been placing Australian judicial predation analysis on the tracks of certainty and consistency, the obiter comments made by Lockhart and Gummow JJ. may have derailed the train. This effect was not an outcome of any expressed refusal to consider objective tests but is derived from a reluctance to import such tests without first considering their congruence with the objectives of the TPA and §46.

While the court’s conservatism is understandable and warranted, it is submitted that not all of its comments should be seen in the same vein. Being cautious is one thing; advocating a return to purely subjective tests and a literal application of the law is another. In the court’s opinion, “[w]hether the finding as to purpose . . . should be inferred from the evidence must be judged by considering not only the logic of the matter . . . [but also] whether ‘general human experience’ would be contradicted”. What the court fails to realise, however, is that the contradiction is within their statement;

cost-based tests are, in theory, the antithesis of “general human experience”. The court fails to recognise that the purpose of objective tests—whether cost-based or otherwise—is to reduce, if not eliminate, the reliance on subjective evaluations. With this goal in mind, the objective tests have been developed to incorporate the possibility of alternative and justified business reasons for alleged predation. Thus, the underlying logic upon which objective tests are built inherently excludes “general human experience” as a companion test.

That the objective and subjective tests are not meant to co-exist in theory does not mean that they should not do so in practice. As has been implied throughout this part, the theoretically superior qualities attributed to objective tests by their proponents are not always (if ever) achievable in reality due to evidentiary constraints and the inherent assumptions of the various objective tests. A very strong argument can be made for the inclusion of evidence of subjective intent of the type found in *Brooke Group* and *AKZO* as an element which is used to assign legality within the framework of an objective standard. However, it is submitted that the application of a separate test as *ad hoc* and nebulous as “general human experience” cannot be justified within such a framework.³⁴⁸

This conclusion ties in with a more fundamental deficiency within the court’s obiter statements. As was stressed in the discussion on *AKZO*, any judicial standard for identifying predation must serve the objectives of the relevant competition legislation. Arguably, the necessity of this relationship was recognised by the court when it stated that “[i]t would be . . . an error to translate into the operation of s. 46 the United States decisions dealing with ‘predatory pricing’ at the expense of an independent examination of the Australian legislation as it applies to each case.”³⁴⁹ However, as mentioned previously, the court followed this statement by placing heavy emphasis on the proscribed purposes of §46. Such an emphasis could detract from the objectives of the

³⁴⁸ I am grateful to John Walsh for directing my attention to Oliver Wendell Holmes’s famous statement that “[t]he life of the law has not been logic: it has been experience.” (Holmes, O.W., *The Common Law*. Boston: Little Brown, 1881, at 1.) Lest I be misinterpreted, I do not argue that there is *no* place for “general human experience” in predatory pricing adjudications. To the contrary, in fact. I believe that this wisdom should be employed during *all* phases of the adjudication. It should not, however, be employed as a separate test.

³⁴⁹ *Eastern Express Pty. Ltd. v. General Newspapers Pty. Ltd. & Ors.*, *supra* note 3, at 40,307.

TPA, although the court may have believed that the objectives of the TPA would be embodied in the proscribed purposes and thereby still be recognising the necessity of the nexus between the objectives and the standard. Whether such recognition was obtained directly or indirectly, or at all, is a moot point and not crucial; what is important to see is that the court has failed to comply with this requirement. On the one hand it claims that United States standards should not be imported until an assessment of the TPA is conducted to ensure that there are no conflicts between the standards and the legislation. On the other hand, without conducting such an assessment, it then proceeds to claim that cost-based tests should not be instituted without an overriding test of “general human experience”. Until there is a clear conception of the objectives of §46, whether they be competition or competitor focussed, appropriate judicial standards for the identification of predatory pricing within Australia cannot be developed.

Conclusions

The preceding case studies plainly illustrate that predatory pricing cases are extremely difficult to adjudicate and sympathy must be held for jurists who are placed in the unenviable position of deciding such cases. Irrespective of whether the factual and legal deficiencies identified within the preceding case studies are valid criticisms, the number of criticisms made highlights the vast range of issues which courts must overcome in cases of this nature. When the A–T test was introduced its greatest benefit was purported to be the objectivity which it substituted for the then ingrained subjective assessments. An associated benefit was claimed to be the greater ease of administration which it would provide. However, as the United States circuit courts soon discovered, the practical reality was that the test presented a raft of new issues which had to be dealt with. Difficult questions of subjective intent were supplanted by equally difficult questions of appropriate cost standards and cost allocation. In light of this, it is hardly surprising that courts would feel a little reluctant to embrace the introduction of game–theoretic predation models which prove that even more complicated predatory strategies can be rational and should be considered.

As has been emphasised throughout the preceding case analyses, whatever standard is ultimately adopted within a jurisdiction, it must exhibit a congruency with the objectives of that jurisdiction’s competition laws. It is this factor which, above all others, caused the divergence in standards provided by the different courts. The prominence of the recoupment test in the United States Supreme Court’s standard could not be justified in the EEC where non–economic objectives are relevant. Similarly, the desire within the EEC, at least as far as the Commission is concerned, to accept the possibility that above–cost pricing can be predatory and thereby to frame standards in which subjective intent plays an important (or in the Commission’s case, the primary) role, has been essentially rejected in the United States. In the case of Australia, the most that can be said is that the Full Federal Court may have expressed a desire to see that the objectives of the TPA are in accordance with any standard which is ultimately adopted.

It is submitted that placing primary reliance on the objective of the relevant competition legislation will help courts solve two of the primary problems involved with predatory pricing adjudication. In the first instance, it can indicate the potential danger which new theories of predation will pose to the values which society holds dear within that jurisdiction. For example, the Supreme Court's decision to reject allegations of above-cost predation was facilitated by its belief that the objective of economic efficiency would be harmed more by attempting to condemn such behaviour.³⁵⁰ Conversely, the European Commission was faced with a greater range of relevant objectives which needed to be considered and concluded that the dangers posed by above-cost predation to these multiplicity of objectives were so great that a standard which proscribed such cases was warranted.³⁵¹ The second area where focusing on the objectives can help is the problem of contradictory and conflicting standards. Criticisms were made of both the European Commission and the Full Federal Court of Australia for prescribing standards which were contradictory. In both cases, if the standards had been established from a basis of the objectives of the relevant competition legislation, it is likely that there would be no grounds for such criticisms.

Courts are faced with a great array of plausible predation strategies which theoretically deserve to be considered and, at least within the United States, the EEC and Australia, a society which views predatory pricing as an anticompetitive behaviour and which requires proscription. The courts must therefore frame workable and effective standards which will provide the greatest accuracy and certainty at the least cost. As the preceding cases indicate, this is far from an easy task, but if the objectives of competition legislation are allowed to dictate the ultimate form and content of the predation standards, then the probability will be greatly enhanced that the result will be the desired one.

³⁵⁰ See text accompanying note 103, *supra*.

³⁵¹ See text accompanying notes 254-255, *supra*.

PART IV

Predatory Pricing and New Zealand Competition Law

CHAPTER A

Predatory Pricing as a Concern of the Commerce Act

CHAPTER B

Controlling Predatory Pricing Under Section 36

Introduction

The term “predatory pricing” is not defined in the *Commerce Act* 1986 nor has the concept been the subject of substantive discussion in any New Zealand court proceeding. Nevertheless, as a result of the country’s market structure and recent economic history, there exists a strong possibility that the conduct would have been performed in the past and/or will be attempted in the future. In the space of a single decade, the New Zealand economy underwent a structural transformation unprecedented in the industrialised world. During the early 1980s the scale of government intervention and industry protection in New Zealand ranked among the highest in the western world; by 1990, most of the protection has disappeared and the government had adopted an avowed policy of allowing resources to be allocated by market forces. Under this policy, markets were deregulated, government sanctioned monopolies were opened up to competition and almost all state owned enterprises were either corporatised or privatised.

Nevertheless, this process of economic liberalisation did not assure competition in all markets. The legacy of decades of intervention and protectionism was entrenched monopolies and high market concentration. New Zealand’s geography and relatively small population created a number of natural barriers and as a result many of the former government sanctioned monopolies retained, at least in the initial years, their positions of dominance. These positions have been, and are, under threat from advancing technology which is providing the capabilities to dismantle previously immovable barriers to entry. Accompanying this process is a pressure upon the incumbent firms to retain their market positions; this is, of course, the pressure of competition. However, competition has a companion. This is the pressure to engage in anticompetitive conduct, and predatory pricing presents itself as one alternative. This alternative may be relatively attractive to these incumbents because these firms often hold large financial resources and entry into the markets in which they operate frequently requires substantial sunk costs.

This part draws from the conclusions of parts II and III to determine the most appropriate form of proscription for predatory pricing in New Zealand. Chapter A examines the harm posed by predatory pricing to New Zealand. The starting point for determining whether any conduct should be legally proscribed involves an examination of whether that conduct is inimical to the attainment of desired objectives or goals. Thus, the chapter begins by identifying the objectives of New Zealand's competition legislation. An examination is then performed to determine whether, and by what means, predatory pricing would encumber the attainment of these objectives. In particular, this involves an enquiry into, *inter alia*, whether successful, unsuccessful and above-cost predation should be proscribed.

Having identified the types of predatory pricing which are inimical to the attainment of the Act's objectives, chapter B evaluates the efficacy of §36 in proscribing these types of predatory behaviour. Section 36 has three constituent elements—dominance; “use” of that dominant position; and use of that position for a proscribed purpose—and the operation of each of these elements is discussed with regard to predatory pricing. This discussion enables the efficacy of the section to accurately identify types of predatory pricing behaviour deserving condemnation to be evaluated. It is concluded that, in general, the structure of the section and the manner in which it is currently interpreted by the judiciary will enable §36 to be an effective weapon against the dangers posed by predation.

A

Predatory Pricing as a Concern of the Commerce Act

Like its American, European and Australian counterparts, the objectives of the *Commerce Act* are not easily discernible. The long title to Act states that it is “[a]n Act to promote competition in markets within New Zealand . . .”¹ However this title is of little help because the term “competition” is itself not capable of precise definition.² Relief is apparently provided by §3(1) which defines “competition” in the context of the Act to mean “workable or effective competition.” Yet no further guidance is given as to the meaning of “workable competition” or “effective competition” and neither of these terms are distinct concepts in the lexicon of law or economics or are widely used in general parlance.³ To determine the meaning behind these terms requires an investigation into the roots of the *Commerce Act* and, in particular, to case law under the Australian *Trade Practices Act* 1974.

Unlike the *Commerce Act*, the TPA makes no reference to “workable competition”; however, following the Australian Trade Practices Tribunal’s decision in *Re Queensland Co-operative Milling Association Ltd.*⁴ (hereafter referred to as “*QCMA*”) this is how Australian courts conceptualise competition. In *QCMA* it was stated that:⁵

[I]n identifying the existence of competition in particular industries or markets, we must focus upon its economic role as a device for controlling the disposition of society’s resources. Thus we think of competition as a mechanism for the discovery of market information and for enforcement of business decisions in light of this information . . .

¹ Long Title, *Commerce Act* 1986.

² See Ahdar, R.J., “The Meaning of ‘Competition’ and the Commerce Act 1986.” *Otago Law Review*, 6(2), 1986, 319-333.

³ “The phrase ‘workable competition’ is not susceptible to precise, universally accepted definition . . .” (Brunt, M., “Market Definition’ Issues in Australian and New Zealand Trade Practices Legislation.” In Ahdar, R.J. (ed.), *Competition Law and Policy in New Zealand*. Sydney: Law Book Company, 1991, 115-154, at 128.)

⁴ *Re Queensland Co-operative Milling Association Ltd.* (1976) A.T.P.R. ¶40-012.

⁵ *Ibid.*, at 17-245.

This does not mean that we view competition as a series of passive, mechanical responses to 'impersonal market forces'. There is of course a creative role for firms in devising the new product, the new technology, the more effective service or improved cost efficiency. And there are opportunities and rewards as well as punishments. Competition is a dynamic process; but that process is generated by market pressure from alternative sources of supply and the desire to keep ahead.

As was said by the US Attorney-General's National Committee to Study the Antitrust Laws in its Report of 1955 (at page 320):

The basic characteristic of effective competition in the economic sense is that no one seller, and no group of sellers acting in concert, has the power to choose their level of profits by giving less and charging more. Where there is workable competition, rival sellers, whether existing competitors or potential new entrants into the field, would keep this power in check by offering or threatening to offer effective inducements. . .

Or again, as is often said in U.S. antitrust cases, the antithesis of competition is undue market power, in the sense of the power to raise price and exclude entry. That power may or may not be exercised. Rather, where there is significant market power the firm (or group of firms acting in concert) is sufficiently free from market pressures to 'administer' its own production and selling policies at its discretion. Firms may be public spirited in their motivation; but if their business conduct is not subject to severe market constraints this is not competition. . . .

In our view effective competition requires both that practices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service package offered to consumers and customers.

The concept of competition provided in *QCMA* was subsequently approved in a number of New Zealand cases under both the 1975 and 1986 Commerce Acts.⁶ New Zealand courts have also cited the following statement by Heydon on the meaning of "workable competition" with approval:⁷

Workable competition means a market framework in which the pressures of other participants (or the existence of potential new entrants) is sufficient to ensure that each participant is constrained to act efficiently and in its planning to take account of those other participants or likely entrants as unknown quantities. To that end there must be an opportunity for each participant or new entrant to achieve an equal footing with the efficient participants in the market by having equivalent access to the means of entry, sources of supply, outlets for product, information, expertise and finance. This is not to say that particular instances of the items on that list must be available to all. That would be impossible. For example, a particular customer is not at any one time freely available to all suppliers. Workable competition exists when there is an opportunity for sufficient influences to exist in any one market which must be taken into account by each participant and which constrains its behaviour.

⁶ The extent of approval was highlighted by the High Court in *Fisher & Paykel Ltd. v. CC* (1990) 3 N.Z.B.L.C. 101,655 where it stated that (*ibid.*, at 101,680):

The relationship between workable competition and market power can be gleaned from a study of the often cited dicta in *QCMA*. We make no apology for not reproducing the familiar expose of competition, not because we disagree with it—on the contrary, we agree wholeheartedly with it, but we think it so well known as to make quotation unnecessary.

⁷ Heydon, J.D., *Trade Practices Law*. Sydney: Law Book Company, 1, 1989, at 1548. Cited in *Auckland Regional Authority v. Mutual Rental Cars (Auckland Airport) Ltd.* (1988) 2 N.Z.B.L.C. 103,041, at 103,062; *Fisher & Paykel Ltd.*, *supra* note 6, at 101,678.

Therefore, workable competition differs significantly from the economic concept of perfect competition. The concept of perfect competition is a static notion which involves the existence of a number of prerequisites—namely many buyers and sellers, homogeneous products, perfection information, no transaction or transportation costs, and complete freedom of entry and exit. These conditions exist in very few (if any) markets in the real world and the concept is essentially an extreme abstraction of reality. Importantly, virtually all markets are incapable of operating as perfectly competitive markets and, in any case, there is little evidence that the maximum benefit to society would accrue from such a result.

In contrast to the concept of perfect competition, as stated in *QCMA* and implied by Heydon, workable competition is a dynamic concept—it is a process. It is that process of firms being pressured by their actual and potential competitors to provide goods or services in a manner which will better satisfy the desires of customers and consumers so that those firms will survive. The key words of this process are “pressure”, “better satisfy” and “survive”. Heydon’s definition clearly emphasises the necessity of a lack of barriers to effective entry. A firm will only feel pressured where other firms already exist or can enter to replace that firm in the markets where it derives its revenue. This pressure compels a firm to “better satisfy” the requirements of the market so that it may obtain the consumer’s dollar. Finally, although firms’ objective may be to be victorious, the reality is survival. Once the terms “victorious”, “overcome”, “vanquish” or “conquered” become applicable, workable competition does not exist. These terms are static in nature and imply the absence of the competitive pressure which sustains the perpetual search for a better price or product which, in turn, allows a firm to survive.

While the purpose of the Act is to promote workable competition, this goal is only a means to a number of ends. As the High Court observed in *Union Shipping New Zealand Ltd. v. Port Nelson Ltd.*:⁸

The object of the Commerce Act is evident in its long title: ‘An Act to promote competition in market within New Zealand. . .’. The emphasis is upon promoting ‘competition’.

⁸ *Union Shipping New Zealand Ltd. v. Port Nelson Ltd.* (1990) 3 N.Z.B.L.C. 101,618, at 101,639.

In the words of *Richardson J.* delivering the decision of the Court of Appeal in *Tru Tone Ltd. & Ors v. Festival Records Retail Marketing Ltd.* (1988) 2 NZBLC 103,286 at page 103,291. . . '[I]t is based on the premise that society's resources are best allocated in a competitive market where rivalry between firms ensures maximum efficiency in the use of resources.' It is the permission of competition which the Court is directed to foster. Parliament, as a matter of policy, has decided benefits will flow from that course. Whether such is a correct economic or social analysis is not a matter for the Court.

This pronouncement emphasises the allocative and productive efficiency benefits which workable competition provides. However, substantial ambiguity surrounds the actual benefits which Parliament intended to flow from the correct application of the Act. In line with the debate in other jurisdictions, this issue has been a source of significant dispute in New Zealand.⁹ On the one hand, some commentators consider that, in addition to economic benefits, socio-political concerns are relevant as the Act is currently structured.¹⁰ Such socio-political concerns include, *inter alia*, the distribution of wealth, freedom of the democratic polity, freedom of trade and choice, the protection of small business and dynamic efficiency.¹¹ On the other hand, commentators usually associated with the Chicago School of antitrust claim that the sole goal of competition legislation should be to maximise the sum of allocative and productive efficiency.¹² The debate is relevant to this thesis because of the difficulty in precisely defining (and therefore devising principles and tests for) the concept of workable competition. If workable competition is able to be considered an instrumental concept which is used for the promotion of more fundamental concepts, it may be easier to simply compare the effects of predation against these concepts.

Support for the claim that economic efficiency should be viewed as the goal of the Act may be found in the Parliamentary debates on the *Commerce Bill* 1986. The

⁹ See, e.g., Ministry of Commerce, Treasury, Department of Justice, Department of the Prime Minister and Cabinet, *Discussion Document and Review of the Commerce Act 1986*. December 1991; New Zealand Business Roundtable, *Antitrust in New Zealand: The Case for Reform*. Wellington: New Zealand Business Roundtable, 1988; Jennings, S. & Begg, S., *An Economic Review of Commerce Commission Decisions Under the Commerce Act 1986*. Report Prepared for the New Zealand Treasury, Wellington, 1988.

¹⁰ See generally, Ahdar, R.J., "The Authorisation Process and the Public Benefit Test." In Ahdar, R.J. (ed.), *Competition Law and Policy in New Zealand*. Sydney: Law Book Company, 1991, 217-248; Ahdar, *supra* note 2; Greer, D.F., *Market Dominance and Anticompetitive Effect Under New Zealand's Merger Policy*. Research Monograph No. 51, Wellington: New Zealand Institute of Economic Research, 1989.

¹¹ See generally, Elzinga, K.G., "The Goals of Antitrust: Other than Competition and Efficiency, What Else Counts?" *University of Pennsylvania Law Review*, 125, 1977, 1191-1213.

¹² Robert Bork, a preeminent Chicago School adherent, perhaps best describes this goal when he states that "[t]he whole task of antitrust can be summed up as the effort to improve allocative efficiency without impairing productive efficiency so greatly as to produce either no gain or a net loss in consumer welfare." (Bork, R.H., *The Antitrust Paradox*. New York: The Free Press, 1993, at 91.)

Bill was introduced by the fourth Labour government at a time when the face of New Zealand's economic landscape was undergoing tumultuous change. After decades of interventionist and protectionist policies, the election of the fourth Labour government in 1984 marked the beginning of a process of economic and social liberalisation which has continued to the present day. Industry protection was virtually eliminated, most State owned enterprises were either privatised or corporatised, the financial, labour, energy, transport and telecommunications markets were deregulated and, more generally, the health and education sectors were significantly restructured with the aim of introducing more competition and accountability. The enactment of the *Commerce Bill* was seen as critical if society was to reap the benefits from competition. As the then Minister of Trade and Industry, David Caygill, stated on the introduction of the Bill:¹³

The Bill represents a key part of the Government's policy to improve the performance of the economy and to restore and maintain long term growth. . . . As the long title states, the purpose of the Bill is to promote competition in New Zealand markets. By doing so the Bill will ensure that, as New Zealand moves away from Government regulation of markets, that position will not be replaced by anticompetitive behaviour by individual companies or groups of traders. The Bill. . . will ensure that the conditions for workable and effective competition exist and that the benefits of increased *economic efficiency* and growth are enjoyed by all members of the community, including consumers.

Thus economic efficiency was singled out as a benefit sought from the promotion of workable and effective competition. Although very few court decisions have considered the objectives of the Act, it is arguable that the statement by the Court of Appeal in *Tru Tone* that the Act "is based on the premise that society's resources are best allocated in a competitive market where rivalry between firms ensures maximum efficiency in the use of resources"¹⁴ provides support for the argument that economic efficiency is the sole goal of the Act.

In conflict with the preceding views, there exists strong evidence that economic efficiency is not the sole goal to the Act. First, and most persuasively, is the fact that in years immediately preceding the *Commerce Amendment Act* 1990 it was advocated that the long title to the Act be amended to explicitly constrain the object of the Act to

¹³The Hon. David Caygill, *New Zealand Parliamentary Debates*. June 11, 1985, at 4681 (emphasis added).

¹⁴*Tru Tone Ltd. & Ors. v. Festival Records Retail Marketing Ltd.* (1988) 2 N.Z.B.L.C. 103,286, at 103,291.

economic efficiency.¹⁵ No change was made. The rejection of such explicit recommendations can only evidence an unwillingness by Parliament to limit the objectives of the Act to economic efficiency. Second, the scheme of the Act itself raises doubts as to whether economic efficiency is the sole concern. For example, part V of the Act provides for the authorisation of certain anticompetitive practices on public benefit grounds by the Commerce Commission. The *Commerce Amendment Act* 1990 inserted §3A which requires the Commerce Commission to have regard to efficiencies in any assessment of the likely public benefit accruing from any conduct. Importantly, the section does not restrict the possible public benefits to efficiencies and the Commission has accepted a range of claimed public benefits which would not necessarily advance either allocative or productive efficiency.¹⁶ However, during a review of the Act conducted in 1992,¹⁷ the New Zealand Treasury and the Ministry of Commerce recommended that the Act be amended to ensure that efficiency considerations were paramount in any public benefit test. The Government endorsed these recommendations although, to date, legislation has not been introduced to effect these recommendations.¹⁸

As the preceding discussion illustrates, the underlying benefits sought from the Act are nothing less than ambiguous. There is no doubt that the Act has a fundamental economic basis and viewed in the context of the economic reform which occurred during the drafting of the Act, the argument that these economic fundamentals provide the sole objective for the Act is persuasive. However, the conflicting scheme of the Act cannot be overlooked and the unwillingness of Parliament to amend the long title indicates that if it ever considered that economic efficiency to be the sole objective of the Act, its position has now altered.

The ambiguity of the Act's objectives represents a significant barrier to the achievement of the purpose of this thesis. The objective of this chapter is to determine

¹⁵ See New Zealand Business Roundtable, *supra* note 9; Jennings & Begg, *supra* note 9.

¹⁶ Ahdar, "The Authorisation Process and the Public Benefit Test.", *supra* note 10, at 239-247.

¹⁷ Ministry of Commerce, Treasury, Department of Justice, Department of the Prime Minister and Cabinet, *supra* note 9.

¹⁸ It is possible that following its slender one-seat majority after the 1993 elections, the National government was not willing to enact the recommendations for fear that the legislation would not have sufficient support to be passed or that the legislation would be perceived unfavourably by the public. Whether the original recommendations will be enacted by the next government (the first to be elected under the MMP (Mixed Member Proportional) election system) is debatable.

the efficacy of §36 in proscribing types of predatory pricing which would be harmful to the objectives of the Act. This necessarily requires that the objectives of the Act be determined so that the types of predation can be evaluated for the extent to which the effects of such conduct are inimical to the attainment of the objectives. Only then can §36 be evaluated for its efficacy in condemning harmful predation. The issue therefore is what should be taken as the goals of the Act for the purpose of the current assessment. It should be noted that it would be illogical to simply circumvent the specific objectives and examine the words of §36. Employing the words of §36 and judicial interpretation of this section as a basis against which predation is evaluated and then evaluating that section for its efficacy in identifying such predation constitutes circular reasoning. Therefore an independent concept is required. The three alternatives for this independent concept are (i) workable competition; (ii) economic efficiency in the sense of allocative and productive efficiency; and (iii) socio-political and economic efficiency concerns.

Arguably the specific benefits sought from workable competition should not be employed for the purposes of examining whether predatory pricing will harm the objectives of the Act. It could be claimed that the goal of the Act is plainly specified in the long title and therefore it is the benchmark of workable competition against which predatory pricing must be assessed for its possible harmful nature. While there is some strength in this argument, this does not simplify the assessment. As the preceding discussion on the concept indicates, workable competition does not lend itself to precise definition and is not characterised by distinctive, identifiable features.¹⁹ The task of assessing the potential harm of predation would, in one sense, be considerably simplified if the goals of the Act were confined to economic efficiency or even extended to include specific socio-political ends. The effects of different types of predation could be easily compared to each objective and a conclusion reached on whether that type is

¹⁹ Further complicating this assessment is the fact that unilateral predation is a behaviour which, if anticompetitive, would be condemned under §36. As Heydon explains, the rationale for this section is that “[t]here is little point in proscribing the fixing of prices or the limiting of production by agreement between competitors if the purpose of achieving like results by a firm in a monopoly position (and hence, often, their achievement) is not controlled.” (Heydon, *supra* note 7, at 2511.) The problem arises from the words of the section not mentioning “competition”. Although the concept of competition is closely related to the concepts of dominance, use and purpose employed in §36, the lack of reference to competition in the section nevertheless means that judicial discussions of the concept are held in the context of the prohibitory sections which mention competition, in particular §§27 and 30.

worthy of condemnation. However, apart from the difficulty in identifying the appropriate objectives, employing specific objectives also complicates the evaluation because in some cases it leads to conflicting conclusions. For example, a strong argument can be made that allocative efficiency is not harmed for practical purposes when the market structure does not allow recoupment. Yet this conclusion will conflict with that reached where fairness between individual competitors is a relevant concern. There is seemingly no means by which a trade-off between these conclusions can be conducted and therefore no way of knowing whether such unsuccessful predation should be condemned.

Although the previous discussion has highlighted only a few of the difficulties in identifying the relevant objectives of the Act, it is apparent that the objectives are not indisputable. Yet the objectives must be identified in order that the purpose of this thesis may be achieved. Consequently, a pragmatic solution is employed. In the first instance, types of predatory pricing will be evaluated against the albeit imprecise concept of workable competition. Because of the prominence given by the judiciary to economic efficiency arguments in recent cases, a brief discussion will also be conducted on the harm posed by predation to the attainment of this objective. It is found that the conclusions reached for workable competition and economic efficiency are not ultimately substantially different. It is submitted that the decision to not evaluate predatory pricing for its direct effect on socio-political concerns is justified by the lack of explicit judicial acknowledgment of such concerns and the uncertainty among commentators regarding which concerns are actually relevant.

There is a dearth of judicial discussion on the relevant principles and tests of workable competition.²⁰ On those few occasions when the concept of workable competition has been considered by the New Zealand courts, principles set out in *QCMA* have received strong support. In particular, these principles were approved by

²⁰ *Gault on Commercial Law*. Wellington: Brooker & Friend, 1994, Ch. 3, at 3-30.

the High Court in *Fisher & Paykel*²¹ and (implicitly) by the Court of Appeal in *Tru Tone*.²² In *QCMA* the Tribunal stated:²³

Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate. The elements of market structure which we would stress as needing to be scanned in any case are these:

- (1) The number and size distribution of independent sellers, especially the degree of market concentration;
- (2) The height of barriers to entry, that is, the ease with which new firms may enter and secure a viable market;
- (3) The extent to which the products of the industry are characterised by extreme product differentiation and sales promotion;
- (4) The character of 'vertical relationships' with customers and with suppliers and the extent of vertical integration; and
- (5) The nature of any formal stable and fundamental arrangements between firms which restrict their ability to function as independent entities.

Of all these elements of market structure, no doubt the most important is (2), the condition of entry. For it is the ease with which firms may enter which establishes the possibilities of market concentration over time; and it is the threat of entry of a new firm which operates as the ultimate regulator of competitive conduct.

In addition to these structural factors, firms' behaviour is also relevant. As the Chairman of the Commerce Commission stated when discussing the Commission's decision in *Visionhire/Sanyo*²⁴ where the *QCMA* principles were referred to with approval:²⁵

[B]ehaviour in the market and the conduct of the participants may influence the determination of the Commission as to whether effective competition exists in any given market. Conduct may therefore be relevant to determining whether the market structure is satisfactory.

The relevance of firms' market conduct was subsequently implicitly accepted by the Court of Appeal in *Tru Tone*.²⁶

As stated in *QCMA*, competition is the antithesis of market power.²⁷ Whereas the former concept implies the existence and operation of constraints, the latter implies the absence of such constraints. Also acknowledged in the *QCMA* judgment was the

²¹ *Fisher & Paykel Ltd v. CC*, *supra* note 6, at 101,680.

²² *Tru Tone Ltd. & Ors. v. Festival Records Retail Marketing Ltd.*, *supra* note 14, at 103,291-103,292. and 103,295-103,296.

²³ *QCMA*, *supra* note 4, at 17,246.

²⁴ *Visionhire/Sanyo* (1984) 4 N.Z.A.R. 288.

²⁵ Collinge, J., cited in Hampton, L.F., "Aspects of the Commerce Act 1986." In Farrar, J.H. & Borrowdale, A. (eds.), *Butterworths Commercial Law in New Zealand* (2nd ed.), Wellington: Butterworths, 1992, 635-802, at 658.

²⁶ *Tru Tone Ltd. & Ors. v. Festival Records Retail Marketing Ltd.*, *supra* note 14, at 103,295-103,296.

²⁷ For a brief but excellent discussion on the concepts of market power and effective competition within the Australasian context, see Brunt, *supra* note 3, at 122-129.

discretionary nature of market power. A firm (or group of firms acting collectively) unconstrained by competitive forces is not obliged to price supracompetitively. Rather, it has the discretion to do so. Constraints are therefore the essence of effective competition and market power. Whether such constraints exist is a question of the availability of actual and potential demand and supply substitutes²⁸ and the conduct of upstream or downstream parties. In turn, the existence and degree of these concepts will be inferred in any particular case through an evaluation of the structure of the market, and the conduct and performance of the market participants. While conduct and performance factors are relevant to assessing whether workable competition exists, it is probably fair to say that it is relatively more difficult to clearly infer the level of constraints acting upon market participants from performance and, to a lesser extent, conduct, and therefore greater emphasis will usually be placed upon structural factors.²⁹

When employing workable competition as the basis of evaluation, whether a type of predation will be detrimental must be analysed from the point of view of the effect of the behaviour on the competitive constraints. The relevant question may be phrased as: Will predation decrease, or halt the operation of, constraining competitive forces? This acknowledges that predatory pricing will be engaged in to eliminate, discipline and/or deter competitors. This framework is used to evaluate the competitive effect of the three types of predation, Deep Pocket, reputation, and signalling. Where relevant, each type is also discussed with reference to its competitive effect when unsuccessful and where the predatory prices are above cost.

Conventional predation of the Deep Pocket type which is successful will be harmful to workable competition. Successful Deep Pocket predation requires barriers to entry in order to recoup the predatory losses incurred. Where such barriers existed prior to the predatory campaign, the only competition would have been provided by actual competitors. Moreover, for the firm to have succeeded, the actual competitors must

²⁸ Brunt, *ibid.*, at 122.

²⁹ A similar argument was expressed by Greig J., W.G. Shaw and Professor Brunt in *Telecom Corporation of NZ Ltd. v. Commerce Commission & Ors.* ((1991) 3 N.Z.B.L.C. 102,340). It was said that “[t]rue it is that constraints upon market power are necessarily implemented through rivalrous conduct . . . But market structure sets the real limits upon the market conduct that is possible . . . [and therefore] it is market structure that is the primary determinant of market power.” (*Ibid.*, at 102,367.)

have either been eliminated or disciplined to enable the predator to raise prices to supracompetitive levels. Such a result is, by definition, a reduction in workable competition. Any constraint imposed by the existing competitors must have been extinguished in order to provide the predator with the discretion to price supracompetitively.

The critical role played by barriers to entry in the preceding analysis brings into question the rationale for proscribing unsuccessful predation. In the absence of barriers to entry, irrespective of whether the predator actually succeeds in eliminating or disciplining its prey, potential competition still constrains the actions of the predator. The predator cannot price supracompetitively because new entrants will appear and undercut the predator. Thus unsuccessful predation should not be proscribed. However, it is important to recognise all barriers to entry. The predator may actually be attempting to create or sustain a reputation for predation and to use this reputation as the barrier to allow it to reap supracompetitive profits. The question of whether a predatory reputation could ever effectively deter entry by itself is as yet an unanswered empirical question. However it is clear from game-theoretic analyses that such predation can be rational in certain circumstances. If predation was ever engaged in under those circumstances then it would be harmful to workable competition. Moreover, workable competition would be harmed not only in the market where the predatory behaviour was engaged in, but also in any other markets where the predator deters entry because of its predatory reputation.

The third class of predatory pricing behaviour needed to be assessed are signalling and signal-jamming models. As noted in the discussion on such models in part II, the actual effect of successful signalling is the elimination of competitors. Importantly, however, this effect arises only where the market demand is insufficient to support the new entrant. Therefore, pure signalling and signal-jamming models simply illustrate the dynamics of competition in a market faced with overcapacity. Such predation does not decrease or hinder the operation of competitive constraints and therefore cannot be considered harmful to workable competition.

The situation where signalling was extended to deter new entry was also discussed in part II. It was observed that an anticompetitive result could occur through potential entrants' profitability assessments being altered by predators imputing the expectation that predation will occur if demand is weak into the minds of potential entrants and thereby deterring some potential entrants from entering. The process by which potential entrants are deterred in signalling and signal-jamming predation models is analogous to the process of deterrence which occurs in reputational predation models. Where a reputation deters entry, it does so because the potential entrants anticipate that they will be preyed upon and thereby expect their entry value to be negative. Thus it is the expectation of predation which makes the expected entry value negative in both signalling and reputational predation models and therefore, for the reasons that reputational predation models were considered worthy of condemnation, so too should signalling models which result in beneficial entry deterrence.

The final categories of predatory pricing which need to be considered are those reputational and Deep Pocket models involving above-cost predation. Above-cost predation can only occur where there exists an efficiency asymmetry. The predator must be more efficient than its prey. This allows the predator to price above its cost and simultaneously cause the prey to suffer losses. Where the efficiency asymmetry arises from productive efficiency, above-cost predation does not constitute conduct which is inimical to workable competition;³⁰ quite the contrary, in fact. As mentioned, workable competition is a process. It is that process of rivalry between potential and actual competitors who endeavour to better satisfy their customers and consumers demands in order to survive. Survival relies on profitability. Only those who remain profitable can justify remaining in the market and therefore the goal is to maximise long run profitability under the prevailing conditions. Where the search for profitability has resulted in a firm developing or obtaining an efficiency advantage over its rivals, it has earned the right to utilise that advantage in order to maximise its profits. As the Australasian courts have recognised, promoting workable competition does not equate

³⁰ See, generally, Areeda, P. & Turner, D.F., *Antitrust Law*. Boston: Little, Brown & Co., 1978, at ¶710.

with protecting individual competitors.³¹ An efficiency advantage manifesting itself as superior profitability for a firm provides the incentive for innovation among potential and actual competitors. These competitors attempt to achieve the same degree of efficiency and thereby capture some of the supracompetitive profits being earned by the efficient firm. Just as the losses incurred within the signalling models of predation are a fundamental element of the dynamic competitive process, so too are monopoly profits derived from superior productive efficiency.

In contrast to productive efficiency asymmetries, an argument can be made for the proscription of above-cost predation where the predator engages in limit pricing. Limit pricing is a generic term applied to above-cost pricing strategies performed by an incumbent firm to deter entry.³² Under certain conditions these strategies can deter the entry of equally efficient firms while providing the incumbent with supracompetitive profits. While these pricing strategies are not the subject of this thesis, the potential for anticompetitive harm posed by such strategies is relied upon in chapter C to justify not establishing a *per se* legal rule for above-cost pricing.³³

As the preceding discussion shows, where the Act is considered to be protecting workable competition as an end in itself, predatory pricing which fits the Deep Pocket, reputation or entry deterring signalling models should be condemned when there exist effective barriers to entry allowing recoupment. In almost every respect, an equivalent conclusion would be reached if economic efficiency was employed as the objective sought to be protected by the Act. The sole difference occurs in the case where the predator engages in predation through sub-marginal cost pricing yet is ultimately unsuccessful in recouping its losses. In such cases resources can be misallocated during two periods: (i) the period of sub-marginal cost pricing; and (ii) the period of supracompetitive pricing.

³¹ See *Union Shipping New Zealand Ltd. v. Port Nelson Ltd.*, *supra* note 8, at 101,640; *Fisher & Paykel Ltd. v. CC*, *supra* note 6, at 101,680; *Auckland Regional Authority v. Mutual Rental Cars (Auckland Airport) Ltd.*, *supra* note 7, at 103,062; *Queensland Wire Industries Pty. Ltd. v. Broken Hill Pty. Co. Ltd. & Anor.* (1989) A.T.P.R. ¶40-925, at 50,010.

³² There is a substantial volume of literature concerning the rationality and legality of limit pricing strategies. For a concise summary of the literature see, Scherer, F.M. & Ross, D., *Industrial Market Structure and Economic Performance* (3rd ed.). Boston: Houghton Mifflin, 1990, at 356-386.

³³ See chapter B, section 3, *infra*.

Sub-marginal cost pricing involves a misallocation of resources because it enables consumers who are not willing to pay the actual cost of goods or services (i.e. the marginal cost) to acquire these products. Hence unsuccessful predation which involves sub-marginal cost pricing should theoretically be condemned. However, the extent to which such condemnation should occur in reality is questionable. Easterbrook argues that society is not harmed from sub-marginal cost pricing because consumers are the beneficiaries and the producers absorb the cost of their actions.³⁴ As shown above, if second order market interactions are considered then this argument is invalid. Nevertheless, given the large amount of resources employed in the production and supply of any particular good or service, it would be virtually impossible to even identify those markets which were directly deprived of the resources misallocated to the market from sub-marginal cost pricing. This does not even take into account third, fourth and later order interactions. For this reason most economic theories evaluating the welfare effect of any conduct ignore second and later order interactions. It is submitted that competition law should act in a likewise manner and adopt this pragmatic solution to sub-marginal cost pricing. As such, predatory pricing should not be condemned on efficiency grounds where the alleged misallocation of resources only arose from a period of sub-marginal cost pricing, even if allocative efficiency is the sole objective sought to be protected.

In any event, it is possible that the courts would arrive at this outcome. In *Queensland Wire Industries* the High Court of Australia stated of §46 of the TPA that “the object . . . is to protect the interests of consumers, the operation of the section being predicated on the assumption that competition is a means to that end.”³⁵ It is submitted that the New Zealand courts would be inclined to perceive §36 as having a consumer orientation, although whether they would view the purpose of the section as being for the sole benefit of consumers is questionable. From this perspective then, it is likely that the courts would consider the benefits flowing to consumers in the immediate

³⁴ Easterbrook, F.H., “Predatory Strategies and Counterstrategies.” *University of Chicago Law Review*, 48, 1981, 263-337, at 279-280. See discussion in part II, chapter A, footnote 9, *supra*.

³⁵ *Queensland Wire Industries Pty. Ltd. v. Broken Hill Pty. Co. Ltd. & Anor*, *supra* note 31, at 50,010.

market from sub-marginal cost pricing to outweigh any detriment to unidentifiable consumers in unidentifiable second and later order markets.

Unsuccessful predation will also involve a misallocation of resources during any period of supracompetitive pricing. By definition, this period will not be long enough for the predatory losses to be recouped. However until actual competitors enter the market and replace the competitive constraints previously provided by the eliminated prey, supracompetitive profits will have been derived and resources misallocated. Consequently, if efficiency is the sole objective of the Act, unsuccessful predation should be proscribed. Yet as with the misallocation of resources arising from sub-marginal cost pricing, if a pragmatic perspective is adopted it is questionable whether unsuccessful predation deserves condemnation. It was previously argued that the courts are likely to adopt a consumer perspective with respect to the misallocation of resources arising from sub-marginal cost pricing. If one applies the same perspective to this scenario, at first glance it would appear that the courts would reject unsuccessful recoupment because the consumers have enjoyed the period of subcompetitive prices and the predator ultimately bears the costs of its unprofitable attempt at predation. In this scenario, however, the consumer perspective must be extended to acknowledge the supracompetitive prices paid by consumers while the predator is attempting to recoup its losses. These consumers may be entirely different from those who enjoyed the period of subcompetitive prices. If so they would be incurring part of the cost of the predatory campaign without having derived any previous offsetting benefit. Adopting a consumer perspective would presumably have regard to the detrimental effect of the supracompetitive prices on these consumers.

However, consider the scenario where a firm derives an efficiency advantage by purely competitive means. If the predator takes advantage of its superior efficiency and its existing and potential competitors are unable to achieve the same level of efficiency for some time, then the market will become a monopoly. Assume that the monopolist then prices supracompetitively to maximise profits during the period of its relative advantage. For the period until a potential competitor is able to match the efficiency of the monopolist, the consumers which acquire the product at the supracompetitive price are being harmed relative to those in the past and (maybe) the future who pay the

competitive price. Yet it was previously argued that the same consumers which were claimed to be victims of above-cost predation should not be protected because the process which occurred actually represented the dynamics of competition. For the same reason, unsuccessful predation which involves some period of supracompetitive profits should not be condemned.

Thus, if a pragmatic perspective is adopted it is essentially irrelevant whether the effects of predatory pricing behaviour is considered with reference to workable competition or economic efficiency for the outcome is equivalent. Predatory pricing should be condemned where it would decrease or hinder the increase in competitive constraints operating within a market. This will only occur in successful cases of Deep Pocket, reputational or signalling predation. Instances of above-cost predation which simply reflect superior productive efficiency should not be condemned as this would subvert the operation of the fundamental forces of competition which provide the benefits of innovation and efficiency. Similarly, if a pragmatic perspective is adopted, unsuccessful predation should not be condemned. In practice the detrimental effects arising from such behaviour are too difficult to identify and consumers are not directly exploited.

B

Controlling Predatory Pricing Under Section 36

Section 36(1) provides that:

No person who has a dominant position in a market shall use that position for the purpose of—

- (a) Restricting the entry of any person into that or any other market; or
- (b) Preventing or deterring any person from engaging in competitive conduct in that or in any other market; or
- (c) Eliminating any person from that or any other market.

Predatory pricing will only be condemned under §36(1) if it can be brought within the three constituent elements of the section, these being: (i) a person in a dominant position in a market; (ii) “use” of that position; and (iii) use of the position for the purpose of restricting entry into a market, preventing or deterring competitive conduct in a market or eliminating a person from a market.³⁶ This chapter will examine the aspects of each element which have a material impact on the proscription of those types of predatory pricing identified in chapter B as requiring condemnation.³⁷

1 Dominant Position in a Market

The first obstacle which must be overcome by a plaintiff alleging a predatory pricing campaign is to prove that the alleged predator held a dominant position in a market. In order to determine whether this threshold has been satisfied, recourse must be had to §3(8) which defines a “dominant position”. It states:

³⁶ Hampton, L.F., “Section 36(1) of the Commerce Act 1986: An Analysis of its Constituent Elements.” In Ahdar, R.J. (ed.), *Competition Law and Policy in New Zealand*. Sydney: Law Book Company, 1991, 179-216, at 181-182.

³⁷ For a comprehensive commentary on all aspects of the constituent elements of §36(1) see, Hampton, *ibid*; *Gault on Commercial Law*, *supra* note 20, at 144-169. Other commentaries are provided by van Roy, Y., *Guidebook to New Zealand Competition Laws*. Auckland: CCH New Zealand, 1991, at 145-179; Land, J., “Monopolisation: The Practical Implications of Section 36 of the Commerce Act 1986.” *Victoria University of Wellington Law Review*, 18, 1988, 51-82; Hampton, *supra* note 25, at 745-776.

For the purposes of sections 36 and 36A of this Act, a dominant position in a market is one in which a person as a supplier or an acquirer of goods or services either alone or together with any interconnected body corporate is in a position to exercise a dominant influence over the production, acquisition, supply or price of goods or services in that market and for the purposes of determining whether a person is in a position to exercise a dominant influence over the production, acquisition, supply or price of goods or services in a market regard shall be had to—

- (a) The share of the market, the technical knowledge, the access to materials or capital of that person or that person together with any interconnected body corporate:
- (b) The extent to which that person is constrained by the conduct of competitors or potential competitors in that market:
- (c) The extent to which that person is constrained by the conduct of suppliers or acquirers of goods or services in that market.

Section 3(8) provides explicit recognition that the term “dominant position” must be viewed as an economic concept. Paragraph (a) highlights a number of important structural factors which impact upon the existence of a dominant position while paragraphs (b) and (c) focus courts’ attention on the existence of any constraints which restrain independent conduct by the allegedly dominant firm. The origins of this non-exhaustive list of relevant considerations may be traced back to Art. 86 of the *Treaty of Rome* and the definition of a dominant position provided by the Commission of the European Communities in *Re Continental Can*.³⁸ In that case it was stated that:³⁹

Undertakings are in a dominant position when they have the power to behave independently, which puts them in a position to act without taking into account their competitors, purchasers or suppliers. That is the position when, because of their share of the market, or because of their share of the market combined with the availability of technical knowledge, raw materials or capital, they have the power to determine prices or to control production or distribution for a significant part of the products in question. This power does not necessarily have to result from an absolute domination enabling the undertakings which hold it to eliminate all at will on the part of their economic partners but it is enough that they be strong enough as a whole to ensure those undertakings an overall independence of behaviour, even if there are differences in intensity in their influence on the different partial markets.

There has been no substantive judicial consideration of the concept of a dominant position in the context of §36 in New Zealand. The concept has not yet been a major issue in any §36 case and in general the courts have only acknowledged the influence of *Continental Can*⁴⁰ and the relevance of §3(8).⁴¹ Nevertheless, it should be apparent that the essence of determining whether a firm has a dominant position in a market involves identifying whether that firm can act with some degree of

³⁸ *Re Continental Can Co. Inc.* [1972] C.M.L.R. D11.

³⁹ *Ibid.*, at D27. This definition was implicitly accepted by the European Court of Justice on appeal ([1973] E.C.R. 215).

⁴⁰ *Auckland Regional Authority v. Mutual Rental Cars (Auckland Airport) Ltd.*, *supra* note 7, at 103,069.

⁴¹ *Gault on Commercial Law*, *supra* note 20, at 3-36.

independence. As noted in chapter B, the degree of independent behaviour able to be exercised by a firm is negatively correlated with the degree of competitive constraints acting on that firm and the extent of these constraints may be inferred from a range of structural and behavioural factors.

The concepts of dominant position, market power and competition cannot be considered without also considering the concept of a market. While this concept is not required to be examined in detail for the purposes of this thesis, it must be noted that the manner in which the market concept is employed in §36 is of particular importance to allegations of reputational predation. Section 36 does not require that the market in which the dominant position is held be the same as that in which the person who is restricted, prevented etc. operates. Therefore allegations of reputational predation involving the extension of the predatory reputation to other functional or geographic markets will not be prevented from being brought under §36 because of any requirement that the expected effect occur in the same market as the predator is dominant.

Section 36(1) is restricted to a “person who *has* a dominant position in a market . . .”⁴² The section is not directed at anticompetitive conduct performed to establish a position of dominance. Rather, it governs particular conduct performed by firms already in a dominant market position and in this regard it is equivalent to the monopolisation offence within §2 of the *Sherman Act*. However, in contrast to §2, there exists no provision within §36, or, for that matter, in any other provision within the *Commerce Act*, which proscribes unilateral anticompetitive behaviour performed by firms without dominant market power. This creates a gap in the competition law of New Zealand.⁴³ This deficiency has a direct impact on certain predatory pricing allegations in New Zealand because it prevents the condemnation of harmful predation engaged in by a predator which does not hold a dominant position within a market. For example, if a non-dominant firm engaged in predation in an attempt to establish a predatory reputation, thereby erecting a barrier to entry and thus creating a dominant position, it would not satisfy the threshold test of dominance and would not contravene

⁴² Section 36(1), *Commerce Act* 1986 (emphasis added).

⁴³ Hampton, *supra* note 37, at 184.

§36. Because of the absence of any other provision which prohibits unilateral anticompetitive behaviour, such instances of harmful predation would escape condemnation.

The fact that §36 is unable to condemn predation by non-dominant firms would not be a concern if dominance was a prerequisite for successful predation. In fact, it is often argued that market power is a necessary condition for successful predation. However, this argument is only correct where the market power being spoken of is *ex post* market power because such power provides for the recoupment of predatory losses. Upon implementing the predatory prices, the predator is required to have access to sufficient financial resources to allow it to outlast the prey and the productive capacity to supply the market during the price war, but these factors alone will not establish market power. Therefore successful predation does not require that the predator hold a dominant position at the beginning of engaging in its allegedly predatory conduct. Consequently, successful and harmful reputational predation strategies could be performed by non-dominant firms without fear of being in breach of the Act. To enable the condemnation of such strategies, a new provision is required which has the effect of prohibiting attempts to create a dominant position through unilateral anticompetitive conduct.⁴⁴

As shown in chapter B, if the Act serves to promote workable competition or maximise the sum of productive and allocative efficiency, only successful predation should be proscribed. In practice, the dominance threshold enhances the efficacy of §36 in proscribing harmful predation by acting in a manner equivalent to the first tier of the Joskow and Klevorick standard and filtering out those cases where the market conditions are not amenable to recoupment.⁴⁵ The benefit of such a filter is that the costs of proscription will be minimised. As Joskow and Klevorick note:⁴⁶

⁴⁴ Some opposition to such a provision could probably be expected by parties claiming that it would constrain or discourage vigorous yet beneficial competitive behaviour by non-dominant firms. Note, however, that the same argument could be applied to §36 and its condemnation of anticompetitive behaviour by dominant firms. It may be inferred from the existence of §36 that Parliament believed that the courts will be able to distinguish between vigorous competition and anticompetitive conduct. Extending this inference to the new provision would make the argument invalid, although whether the courts can accurately distinguish competitive and anticompetitive conduct is essentially an unanswerable empirical question.

⁴⁵ See part II, chapter C, section 4, subsection (b) and part III, chapter B, section 1, subsection (a), *supra*.

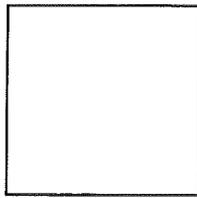
⁴⁶ Joskow, P.L. & Klevorick, A.K., "A Framework for Analysing Predatory Pricing Policy." *Yale Law Journal*, 89(2), 1979, 213-270, at 244-245.

The concern about incurring substantial false positive error costs, by labeling as predatory, pricing behaviour that is not predatory, would be reduced since instances of alleged predation in which such costs were expected to be greatest would be eliminated by the initial 'structural' analysis. Only those situations in which the costs of false negative errors were expected to be high and the costs of false positive errors low would make it across the threshold into the second tier.

Similarly, as Easterbrook J. observed in *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, applying cost-based tests can be extremely complicated and costly because of the difficulty in measuring the defendant's costs and interpreting the resultant figures for the purpose behind the pricing behaviour.⁴⁷ Testing for recoupment will almost always require less resources because the structure of the market and the behaviour of its participants are generally more visible and less contentious than the relevant costs and whether there exists a legitimate business purpose for the conduct. The benefits of cost-minimisation attributed to a structural analysis by Joskow and Klevorick and Easterbrook will only be derived if the analysis is conducted as the initial test. No benefit accrues if the likelihood that an alleged predatory strategy will be successful is determined after other tests are performed. Fortunately, because the New Zealand courts seem to evaluate the three constituent elements of §36 in order, the dominance element is the first element to be considered.

It was previously noted that the dominance element requires an assessment of whether the defendant held a dominant position at the time it began engaging in the conduct at issue. Thus, the temporal focus is on one point in time. In contrast, the recoupment test examines the probability that the market conditions would be amenable to supracompetitive pricing for the period necessary for full recoupment. The temporal focus is on a time period and furthermore, this time period will not include that point in time when the dominant position is required to be assessed. (The difference is illustrated in figure 1.) Therefore, although both the recoupment and dominance examinations focus upon the market conditions, in theory the dominance assessment cannot be considered a substitute for the recoupment test because the focus of these examinations is at different times.

⁴⁷ *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.* 881 F.2d 1396 (7th Cir. 1989), at 1401.



It could be argued that because the dominance and recoupment assessments have a different temporal focus, the dominance element cannot evaluate the probability of recoupment and therefore will not enhance the efficacy of §36 in proscribing predation. Although this argument is theoretically valid, if the practical aspects of assessing dominance and recoupment are considered, it becomes apparent that the two determinations are essentially equivalent. Whether a firm can act with a sufficient degree of independence for it to be considered dominant cannot be correctly determined without acknowledging the dynamic nature of competition. Dominance cannot be assessed by simply examining the present structure of the market; the current market conditions can only be understood if they are considered in the context of the history of these structural features and the behaviour of the market participants. For example, even a monopolist need not be in a dominant position. The history of that market may show that entry has occurred as soon as the monopolist raises its prices, implying that the monopolist is pricing at a competitive level and that there do not exist any effective barriers to entry. It would obviously be invalid to identify the monopolist as having a dominant position in that market. Thus, the history of the market structure and the behaviour and profitability of its participants must be examined for an accurate assessment of the market power of the allegedly dominant firm.

Moreover, for the dominance threshold to be satisfied, the market power cannot be transitory. As Hampton notes:⁴⁸

The ability of a firm to exercise a dominant influence over prices, production etc depends on it possessing a substantial degree of market power. Further, its ability to exert such influence must be sustainable over time. A firm which is forced to follow does not 'determine' or 'influence', but a firm which has the ability to lead independently and sustain that lead over time does have the requisite degree of power needed to satisfy the dominance test.

Therefore, §36 is not concerned with the exercise of *short-run* market power. Such power will arise naturally within a competitive market from a number of sources. For example, a firm which produces an innovative product which better meets the needs of its consumers will temporarily gain the power to raise its prices and derive

⁴⁸ Hampton, *supra* note 25, at 748.

supracompetitive profits. Over time, competitors will develop substitutes for this product and the innovator will lose their market power.⁴⁹ Similarly, a farmer who finds herself the sole supplier of some crop after a storm destroys her competitors' crops will have the power to price without regard to competitors for one season. However, this power is transitory and will be lost as soon as new crops can be grown. Such power does not satisfy the dominance threshold.

The dominant market power referred to in §36 concerns *long-run* market power; that is, market power derived by the dominant firm from some persistent advantage over actual and potential competitors.⁵⁰ The courts will (at least implicitly) extrapolate the historical evidence relating to the market structure and the behaviour and profitability of the market participants in order to predict whether any market power is sustainable. Thus, although the dominance element involves a determination of the extent of market power at a point in time, in order to perform this assessment, both the past and the probable future market conditions must be examined.

In part III it was argued that the correct basis for considering the issue of recoupment was whether, at the beginning of the alleged predatory pricing period, the possibility of recoupment satisfied some degree of probability.⁵¹ This assessment must employ historical data in order to predict the probable future market conditions. Consequently, the same data are used to determine whether recoupment is probable and whether dominance exists. Moreover, because the dominance assessment does involve some examination of the likely future market conditions, it is possible that the future period being predicted overlaps that of the recoupment assessment. It follows that because the same data are used in the assessment of both recoupment and dominance to predict the future, where an alleged predator is found to be in a dominant position, it is probable that the future market conditions would also be found to support recoupment.

⁴⁹ An equivalent process was found by the High Court to occur in *Tru Tone Ltd. & Ors. v. Festival Records Retail Marketing Ltd.* ((1988) 2 N.Z.B.L.C. 103,081). The plaintiffs contended that because of their uniqueness and therefore lack of substitutes, top charting music records constituted separate product markets. The court rejected this proposition on the grounds that "top charting records are too short lived to qualify as any form of dominance." (*Ibid.*, at 103,089.)

⁵⁰ See Schmalensee, R., "Standards for Dominant Firm Conduct: What can Economics Contribute?" In Hay, D.A. & Vickers, J.S. (eds.), *The Economics of Market Dominance*, Oxford: Basil Blackwell, 1987, 61-88, at 63-64; Areeda & Turner, *supra* note 30, at ¶505.

⁵¹ See part III, chapter B, section 1, subsection (e), *supra*.

Therefore, the dominance threshold should provide the cost-minimising benefits of a first stage structural analysis.

Finally, it must be noted that the use of the dominance threshold to substitute for a recoupment test does not conflict with the manner in which the recoupment test is employed by the United States courts. In part III, both the Seventh Circuit's decision in *Rose Acre* and the Supreme Court's decision in *Brooke Group* were discussed with reference to the recoupment test.⁵² In *Rose Acre*, the allegation of predatory pricing was brought under both the *Robinson-Patman Act* and the attempted monopolisation limb of §2 of the *Sherman Act* while *Brooke Group* was litigated under the *Robinson-Patman Act*. As noted in part III, neither the *Robinson-Patman Act* nor the attempted monopolisation offence in §2 of the *Sherman Act* requires the defendant to hold monopoly power (dominant market power).⁵³ Therefore, in neither of these cases was an assessment equivalent to the dominance limb in §36 conducted. The recoupment test was required to be performed to ensure that the market conditions would have allowed the alleged predatory strategy to be successful. Presumably, if allegations of predation were ever brought under the monopolisation limb of §2, the assessment of monopoly power would substitute for an analysis of the probability of recoupment.

2 "Use" of a Dominant Position

The second limb of §36 requires the conduct at issue to be a "use" of a dominant position. The purpose of this limb is to establish a causal nexus between the dominant market power of the firm and the impugned behaviour.⁵⁴ It is important to note that this limb does no more than establish the existence or otherwise of this nexus. As Hampton observes:⁵⁵

By using the neutral word 'use', Parliament indicated that it did not intend that the words 'use that position' should serve as the test for distinguishing a legitimate use of a dominant position from a misuse of such a position. In the s. 36 context the purpose requirement performs this role.

⁵² See part III, chapter B, section 1, subsection (a) & (e), *supra*.

⁵³ See part III, chapter B, section 1, subsection (a), *supra*.

⁵⁴ Hampton, *supra* note 37, at 197.

⁵⁵ *Ibid.*, at 195.

In early cases on §36 the New Zealand courts did not attribute much importance to the phrase “use that position”. In *New Zealand Magic Millions Ltd. v. Wrightson Bloodstock Ltd.*⁵⁶ Tipping J. placed almost no emphasis on the “use” limb. He stated that:⁵⁷

As a first observation I would have thought that if a person having a dominant position acts in a particular way with a prohibited purpose in mind it is almost axiomatic that such a person has used his dominant position for a prohibited purpose. . . .

It seems to me that the key question is not so much whether a dominant party has used its dominant position but rather whether or not its conduct is proved to have been for one or more of the proscribed purposes. . . .

However, it is now clear that “use” constitutes a separate limb of the section. In *Union Shipping* the High Court stated:⁵⁸

Section 36 provides that no person, who has a dominant position in a market ‘shall use that position’ for proscribed purposes. There must be ‘use’ of dominant position for infringement. The section does not say that no person who has a dominant position in a market shall ‘act’ for proscribed purposes.

This was followed by a more explicit recognition of the separate “use” limb by the Court of Appeal in *Electricity Corp. Ltd. v. Geotherm Energy Ltd.*⁵⁹ The court said:⁶⁰

The conduct prohibited by the section is the use of the dominant market position for the proscribed purposes. There will be circumstances in which the use of the market position and the purpose are not easily separated but the two requirements must be kept in mind.

Finally, in the most recent case on §36, the Privy Council in *Telecom Corporation of New Zealand Ltd. & Ors. v. Clear Communications Ltd.*⁶¹ cited both *Union Shipping* and *Geotherm* in holding that “as the Court of Appeal in the present case accepted, use and purpose, though separate requirements, will not be easily separated.”⁶²

The decision of the Australian High Court in *Queensland Wire Industries Pty. Ltd. v. Broken Hill Pty. Ltd.*⁶³ provides the starting point for any discussion on a test for the “use” element in Australasia. BHP produced 97% of steel in Australia and supplied 85% of the country’s steel and steel products. One of its products, Y-bar, was used in

⁵⁶ *New Zealand Magic Millions Ltd. v. Wrightson Bloodstock Ltd.* (1990) 3 N.Z.B.L.C. 101,501.

⁵⁷ *Ibid.*, at 101,527.

⁵⁸ *Union Shipping New Zealand Ltd. v. Port Nelson Ltd.*, *supra* note 8, at 101,645.

⁵⁹ *Electricity Corp. Ltd. v. Geotherm Energy Ltd.* [1992] 2 N.Z.L.R. 641.

⁶⁰ *Ibid.*, at 646-647.

⁶¹ *Telecom Corporation of New Zealand Ltd. & Ors. v. Clear Communications Ltd.* (as yet unreported) 19 October 1994.

⁶² *Ibid.*, at 20.

⁶³ *Queensland Wire Industries Pty. Ltd. v. Broken Hill Pty. Ltd.*, *supra* note 31.

the manufacture of star picket fences, these fences being the most popular type of rural fencing in Australia. BHP was the sole Australian manufacturer of Y-bar and less than 1% of total Y-bar acquired in Australia was imported. QWI competed against BHP in the market for rural fencing wire by producing steel wire from raw materials sourced from BHP. QWI decided to manufacture its own star picket posts and contacted BHP to obtain a supply of Y-bar. After initially refusing to supply QWI, BHP then offered to sell Y-bar but only at a price at which it would be unprofitable for QWI to sell star picket fences. QWI brought an action against BHP under §46 of the TPA alleging BHP was in breach of the section by effectively refusing to sell the Y-bar.

With regard to the “use” limb, the decision by the High Court of Australia in *Queensland Wire Industries* is significant in two respects. First, the court rejected the interpretation of Pincus J. in the Federal Court that the phrase “take advantage of” in §46 of the TPA involved some pejorative connotation. The High Court held that the phrase should be viewed in its neutral sense and thereby be given the meaning of “use”.⁶⁴ The second significant outcome of the case which impacts on the “use” limb is the method by which the court examined whether BHP had used its market power. With regard to this issue, Mason C.J. and Wilson J. held that:⁶⁵

In effectively refusing to supply Y-bar to the appellant, BHP is taking advantage of its substantial market power. It is only by virtue of its control of the market and the absence of other suppliers that BHP can afford, in a commercial sense, to withhold Y-bar from the appellant. If BHP lacked that market power—in other words, if it were operating in a competitive market—it is highly unlikely that it would stand by, without any effort to compete, and allow the appellant to secure its supply of Y-bar from a competitor.

Similarly, Deane J. held that “there can be no real doubt that BHP took advantage of its market power in this case. It used that power in a manner made possible only by the absence of competitive conditions.”⁶⁶ Finally, Toohey J. found that “[t]he only reason why BHP is able to withhold Y-bar . . . is that it has no other competitor in the steel product market who can supply Y-bar.”⁶⁷

⁶⁴ *Ibid.*, at 50,010 (per Mason C.J. and Wilson J.), at 50,012 (per Deane J.) and at 50,023 (per Toohey J.).

⁶⁵ *Ibid.*, at 50,011.

⁶⁶ *Ibid.*, at 50,016.

⁶⁷ *Ibid.*, at 50,025.

Some commentators have argued that these statements established a test for use of market power. In particular, the Australian Trade Practices Commission inferred that the test for whether a firm had used or taken advantage of its market power was “whether its conduct was made possible only by the absence of competitive conditions.”⁶⁸ Similarly, Hanks and Williams derived the following test: “To take advantage of one’s market power is to do something which can only be done because of one’s market power—that could not be done if the market in which one operated were vigorously competitive.”⁶⁹ However, as a number of commentators have observed, these tests are fundamentally flawed because there can exist both legitimate and anticompetitive reasons for the same practice to be employed by a dominant firm.⁷⁰ For example, if BHP had viewed QWI as a credit risk it would have refused to supply in competitive conditions. Therefore, when the same conduct can be performed for an anticompetitive or legitimate reason, the proposed test is not effective because it does not identify the purpose behind the conduct.

Hampton has argued that “[w]hat the High Court [in *Queensland Wire Industries*] presumably had in mind was that the effect of the refusal on Queensland Wire Industries would not have occurred had B.H.P. not been dominant.”⁷¹ It is respectfully submitted that adopting this perspective does not alleviate the fundamental problem inherent in the test. The effect on QWI of BHP’s refusal to supply was that QWI could not compete with BHP in the market for star picket fences. However, returning to the example of BHP refusing to supply because it perceived QWI to be a credit risk, exactly the same effect would occur if BHP operated in competitive circumstances and every other supplier of Y–bar also perceived QWI to be a credit risk. QWI would not be able to obtain Y–bar and it would therefore not be able to produce its own star picket fences.

⁶⁸ Trade Practices Commission, *Misuse of Market Power—A Background Paper*. Canberra: Trade Practices Commission, 1990, at 27.

⁶⁹ Hanks, F. & Williams, P.L., “Implications of the Decision of the High Court in *Queensland Wire*.” *Melbourne University Law Review*, 17(3), 1990, 437-461, at 444.

⁷⁰ Pengilley, W., “Denial of Supply and Misuse of Market Power in Australia: What Follows from the High Court Decision in *Queensland Wire*?” Special Report (16 March 1989), *Australian Trade Practices Reporter* (Loose-leaf Service), at 16; Hampton, *supra* note 37, at 198-199; *Gault on Commercial Law*, *supra* note 20, at 3-149; Brunt, M., “Australian and New Zealand Competition Law and Policy.” In Hawk, B. (ed.), *Annual Proceedings of the Fordham Corporate Law Institute*, New York: Transnational Juris Publications, 1992, 131-193, at 170.

⁷¹ Hampton, *supra* note 37, at 199.

It is submitted that the High Court found that BHP had taken advantage (or “used”) its substantial market power because, *in the circumstances of the case*, it could not have “afford[ed], in a commercial sense, to withhold Y–bar from [QWI]”⁷² if it was operating in competitive market. Essentially, BHP did not have a legitimate business reason for refusing to supply QWI. Support for this viewpoint can be found in the most recent decision on §36, *Telecom Corporation of New Zealand Ltd. & Ors. v. Clear Communications Ltd.* In that case, the Privy Council held that:⁷³

In the Lordships’ view it cannot be said that a person in a dominant market position ‘uses’ that position for the purposes of section 36 unless he acts in a way which a person not in a dominant position but otherwise *in the same circumstances* would have acted.

Despite the obvious error in the sentence—the word “unless” should be replaced with the word “if”—the test clearly derives from the statements made by the Australian High Court in *Queensland Wire Industries*. Importantly, it explicitly states that the test must be performed by considering whether the defendant would have acted in the same manner within a competitive market having regard to all the circumstances (except for the position of dominance) in which the defendant existed. If these circumstances evidence a legitimate reason why the defendant would have performed the same action in a competitive market then it can be said that it has not used its dominant position. Conversely, the dominant position has been “used” if there is no legitimate reason why the defendant performed the action.

There can be no doubt that the Privy Council’s test involves an integration of the use and purpose elements of §36. In fact, to some extent the Privy Council recognised this during its discussion of “use”:⁷⁴

If a person has used his dominant position it is hard to imagine a case in which he would have done so otherwise than for the purpose of producing an anticompetitive effect; there will be no need to use the dominant position in the process of ordinary competition. Therefore, it will frequently be legitimate for a court to infer from the defendant’s use of his dominant position that his purpose was to produce the effect in fact produced. Therefore, as the Court of Appeal in the present case accepted, use and purpose, through separate requirements, will not be easily separated . . .

⁷² *Queensland Wire Industries Pty. Ltd. v. Broken Hill Pty. Ltd.*, *supra* note 31, at 50,011.

⁷³ *Telecom Corporation of New Zealand Ltd. & Ors. v. Clear Communications Ltd.*, *supra* note 61, at 22 (emphasis added).

⁷⁴ *Ibid.*, at 20.

It is further submitted that—barring the obvious error in expression—the Privy Council has expressed the QWI test correctly and that the High Court in *Queensland Wire Industries*, despite emphasising that “take advantage of” was to be viewed in a neutral sense, did not realise that the test subsequently employed actually accords a pejorative connotation to the phrase.

Prior to the Privy Council decision in *Clear v. Telecom*, the *Queensland Wire Industries* test had been implicitly endorsed by the High Court in *Union Shipping*, the Court of Appeal in *Geotherm* and the decisions of both courts in *Clear v. Telecom*.⁷⁵ Therefore, despite the few cases which had discussed the issue of “use”, there existed strong evidence that the New Zealand courts would apply the *Queensland Wire Industries* test. Any remaining doubt as to whether this test is applicable to New Zealand must surely be dispelled by the form and content of the test provided by the Privy Council.⁷⁶

The courts’ acceptance of the *Queensland Wire Industries* test makes it necessary to consider how the operation of this test will affect the efficacy of §36 with respect to proscribing predatory pricing. If an allegation of predation were raised, the question which would be asked is whether the circumstances of the case provided any legitimate reason for the pricing conduct at issue. If the dominant firm could not establish that its pricing behaviour is for a legitimate reason, then the presumably the “use” test would be satisfied. A number of legitimate reasons for pricing below-cost could be claimed including unexpected decreases in industry demand, promotional pricing, large-scale new entry, an anticipated increase in demand, and that the industry was characterised by a significant learning curve.⁷⁷ Similarly, where the alleged predation concerned above-cost pricing, a legitimate reason for lowering prices below

⁷⁵ Scott, P.G., *Raising Rivals’ Costs: Antitrust Ramifications for Section 36 of the Commerce Act 1986*. LL.M. Dissertation, University of Canterbury, 1994, at 118-127. In *Union Shipping* the High Court noted that counsel for the defendants “took the stance that there is no ‘use’ of dominant position where a person simply is doing something which would be done in a competitive situation in any event. Put so baldly, and as a theoretical proposition, few would disagree. If a person simply acts in a normal competitive fashion, as he would whether dominant or not, that person hardly can be said to be ‘using dominance.’” (*Union Shipping New Zealand Ltd. & Anor. v. Port Nelson Ltd.*, *supra* note 8, at 101,645.) See, also *Clear Communication Ltd. v. Telecom Corp. of NZ Ltd.* (HC) [1992] 5 T.C.L.R. 166, at 208 and *Clear Communication Ltd. v. Telecom Corp. of NZ Ltd.* (CA) [1993] 5 T.C.L.R. 413, at 429-430.

⁷⁶ See *Telecom Corporation of New Zealand Ltd. & Ors. v. Clear Communications Ltd.*, *supra* note 61, at 22.

⁷⁷ See Eisenberg, J., “Predatory Pricing in the Context of Australian and New Zealand Competition Law.” *Competition Review*, 4, 1991, 1-42, at 37-40.

those of a competitor would be that the defendant is utilising its lower costs of production.

Arguably, once it has been established that the conduct at issue constitutes “use” of a dominant position, the purpose of conduct could never be for a purpose other than those listed in §36(1)(a)–(c). The Privy Council in *Clear v. Telecom* left this question open and as it is not essential to this thesis, no opinion is expressed.⁷⁸ Nevertheless, given that the purpose element is considered to be a separate element, where the use element has been satisfied the courts will almost certainly continue by examining the purpose of the behaviour. Presumably it would be during this examination that the plaintiff would have to prove that the purpose of the pricing behaviour fell within one or more of the proscribed purposes in §36(1)(a)–(c). Given that it would have been already established that no legitimate reason existed for the behaviour, this would be unlikely to be difficult. In any event, the application of the *Queensland Wire Industries* test does not restrict the efficacy of §36 in proscribing harmful predatory pricing.

Although it has been concluded that the *Queensland Wire Industries* test will not affect the efficacy of §36 in proscribing harmful predation, because this test fails to maintain the neutral meaning of the word “use”, it is worthwhile considering an alternative test proposed by November.⁷⁹ November’s test is derived from research by Vogelenzang who examined the issue of causality in the context of Art. 86 of the *Treaty of Rome*.⁸⁰ Under Vogelenzang’s classification, the following conditions would constitute use of a dominant position within the meaning of §36:⁸¹

- (a) where the conduct could only be performed by a person in a dominant position (market dominance is a sufficient condition for the occurrence of the offence); or
- (b) where the conduct could be performed by both dominant and non-dominant firms:
 - (i) where no harmful effect would have resulted if there had not been a dominant position (market dominance is a necessary condition for the effect to result); or

⁷⁸ The Privy Council stated that “[i]f a person has used his dominant position it is hard to imagine a case in which he would have done so otherwise than for the purpose of producing an anticompetitive effect; there will be no need to use the dominant position in the process of ordinary competition.” (Ibid., at 20.)

⁷⁹ November, J.M., “The Meaning of ‘Use’ of a Dominant Position: From *Queensland Wire* to *Electricity Corp v Geotherm Energy*.” *Victoria University of Wellington Law Review*, 23, 1993, 191-210, at 210. See also, *Gault on Commercial Law*, *supra* note 20, at 3-150.

⁸⁰ Vogelenzang, P., “Abuse of a Dominant Position in Article 86; The Problem of Causality and some Applications.” *Common Market Law Review*, 13, 1976, 61-78. This research was first applied to the New Zealand context by Hampton (*supra* note 25, at 199).

⁸¹ Hampton, *supra* note 37, at 199.

- (ii) where the harmful effect would have occurred irrespective of the market power of the respondent firm, but where the harmful effect was strengthened by the circumstance that the respondent was indeed dominant (market dominance is neither necessary nor sufficient for the effect to result).

November argues that where a dominant firm engages in conduct which falls within either of these categories it has used its dominant position. Under her approach it is irrelevant for the purpose of determining whether a dominant position has been used that efficiencies may be the reason for the behaviour. Rather, such defences are considered when the purpose of the conduct is evaluated. The logic of this approach is clearly expressed in following statement:⁸²

[A] decision that a firm has ‘used’ its dominant position is not sufficient to constitute a contravention of s 36. It is necessary still to show that the conduct which constitutes a ‘use’ of a dominant position was engaged in for one or more of the anticompetitive purposes in s 36(1)(a) to (c). It does not matter that [Vogelenzang’s] categories (b)(i) and (b)(ii) . . . catch conduct which would constitute the use of a dominant position for competitive purposes—all that the test should do is to make a simple causal connection. To go further would be to encroach on the analysis of ‘purpose’, and so risk attaching a pejorative meaning to the word ‘use’ . . .

In contrast to a number of commentators and judges who have inferred that the High Court’s statements in *Queensland Wire Industries* regarding “take advantage of” involve a test similar to that provided by the Privy Council in *Clear v. Telecom*, November argues that these statements actually support her test.⁸³ She states that “[t]heir Honours were referring to BHP’s conduct in all the circumstances of the case; they were not saying that the conduct must fall into a category of behaviour that could only be carried out in a non-competitive environment.”⁸⁴ Moreover, she then seems to imply that there may exist some judicial acceptance of her test by observing that the statements in *Union Shipping* and *Geotherm* are not inconsistent with a broader use test involving Vogelenzang’s classification.⁸⁵ It is clear, however, that no New Zealand court has explicitly adopted the November test and furthermore, it is respectfully submitted that there is no basis for her claims that the High Court in *Queensland Wire Industries* intended anything other than a test of the form provided by the Privy Council

⁸² *Gault on Commercial Law*, *ibid.*

⁸³ November, *supra* note 79, at 199.

⁸⁴ *Ibid.*, at 199 (references omitted).

⁸⁵ *Ibid.* at 206-209.

in *Clear v. Telecom*. Nevertheless, this conclusion in no way detracts from the appeal of her test.

It is submitted that if the word “use” is to be viewed in its neutral sense and if the role of the purpose element is to delineate between anticompetitive and competitive behaviour then the November approach is correct. The influence of a dominant position cannot be observed directly; it must be inferred from the effects of the dominant firm’s behaviour. If some behaviour is performed by a firm in both a competitive market and in a market where it has a position of dominance, *ceteris paribus*, any difference in outcome must be attributed to the difference in market power. The market power may be a result of superior efficiency or of barriers to entry unrelated to efficiency (e.g. a predatory reputation). In either case, it may be inferred that the difference in outcomes is a result of the market power and a neutral perspective of use necessitates that either case is accepted as constituting a use of a dominant position. Whether the nature of the conduct is anticompetitive or competitive is appropriately considered as part of the examination of purpose.

Although it has been argued that the November approach is correct to focus on the effect of a dominant firm’s behaviour in order to determine whether that firm, in performing that conduct, has used its dominant position, the approach may be invalid in one respect. To talk about *the* effect of the dominant firm’s behaviour requires an answer to the question: The effect on what? There would seem to exist two alternatives: (i) the effect on competition; or (ii) the private effect to the dominant firm. November never explicitly identifies which alternative (if either) she supports. However, she explains the Vogelenzang categories in the following way:⁸⁶

First are cases where the act can only be performed by a firm in a dominant position, for example monopoly pricing. . . . Secondly, there are cases where the act can be performed by anyone, for example a refusal to supply, but the *effect on market conditions* would not occur, or would be greater if the firm were dominant.

The term “market conditions” is closely related—but not equivalent—to the concept of competition. It is unclear whether November meant that competition should

⁸⁶ November, *supra* note 79, at 197 (emphasis added).

be the basis of measurement, but it must be noted that “market conditions” is not a synonym for private effect. Yet it is submitted that the correct measure of effect when assessing whether a dominant position has been used is private effect. If the effect of the conduct on competition was examined for possible harm then the examination is not being conducted with a neutral perspective of use in mind. While it will often be the case that private benefit will equate to competitive detriment, there do occur cases where a private benefit can be obtained from a dominant position without competition being harmed (e.g. utilising economies of scale and integration). Employing competition as the measure in such circumstances would be underinclusive.

All types of successful predatory pricing which involve existing barriers to entry⁸⁷ (whether these be efficiency derived or otherwise) will, by definition, provide a private benefit. As such, successful predatory pricing will be considered to be a “use” of a dominant position under the November test. Therefore, although it has been argued that the November approach is more logical than the QWI test, the tests are equivalent in the sense that neither will restrict the efficacy of §36 in proscribing harmful predation.

3 The Proscribed Purposes

The final hurdle required to be overcome by a plaintiff alleging a predatory pricing strategy is to show that the pricing conduct was performed for one of the proscribed purposes in §36(1)(a) to (c). Only intentional conduct will be captured. There is no requirement that the conduct results in one of the outcomes listed nor will it necessarily be the case that where one of the outcomes actually occurs that the requisite purpose will exist. In fact, a dominant firm may intend that the effect of one of the proscribed purposes occurs yet not satisfy the purpose element. This possibility was acknowledged by the High Court in *Union Shipping* when it observed that the concept of a purpose must be distinguished from that of an intention:⁸⁸

⁸⁷ Reputational predatory pricing undertaken to create barriers to entry and thus market power may be distinguished from types of predation undertaken by a predator which already holds some degree of market power. The former type of reputational predation has already been identified as being unable to be condemned through §36 as it is currently drafted (see section 1, *supra*).

⁸⁸ *Union Shipping New Zealand Ltd. & Anor. v. Port Nelson Ltd.*, *supra* note 8, at 101,646 (citations omitted).

[Purpose] is not merely ‘intention’. Intention to do an act, which it is known will have anticompetitive consequences, in itself is not enough. ‘Purpose’ implies object or aim. The requirement is that ‘the conduct producing the consequences was motivated or inspired by a wish for the occurrence of the consequences’: Donald and Heydon *Trade Practices Law*. . . In the words of *Toohy J* in *Queensland Wire Industries v BHP* . . . speaking of Australian sec 46(1)(a)(b) and (c)

The reference to ‘for the purpose of’ carries with it the notion of an intent to achieve the result spoken of in each of the paragraphs in sec 46(1)

Therefore purpose refers to the particular outcome for which an action is undertaken. This is not to say, however, that an action can have only one purpose. In recognition of this, §2(5) holds that:

For the purposes of this Act— . . .

- (b) A person shall be deemed to have engaged in, or to engage, in conduct for a particular purpose or a particular reason if—
 - (i) That person engaged in or engages in that conduct for that purpose or reason or for purposes or reasons that included or include that purpose or reason; and
 - (ii) That purpose or reason was or is a substantial purpose or reason.

Section 2(1A) defines “substantial” to mean “real or of substance.” In the context of §2(5) this means that a purpose shall be deemed to have been present if it was material, but it does not have to be the dominant or sole purpose.⁸⁹

The proscribed purposes in §36(1) refer to the restriction, deterrence, and prevention of “any person”. On a literal interpretation, these purposes emphasise harm to competitors rather than any harm to competition. This raises the question of whether the objective of the section is to protect workable competition or competitors. Adopting a competitor focus could severely restrict the efficacy of §36 in proscribing predation because the protection of individual competitors by no means equates to the protection of workable competition. For example, focusing on individual competitors would result in above-cost predation being condemned; yet such pricing was previously concluded to be, in general, an essential aspect of the competitive process.

In spite of the wording of the proscribed purposes, the courts do not accept that the primary objective of the section is to protect individual competitors. New Zealand courts have adopted a purposive approach and interpreted §36 with reference to the

⁸⁹ Hampton, *supra* note 37, at 206.

objective of the Act, viz. the promotion of competition. In particular, it was stated in *Union Shipping* that:⁹⁰

[Sections 27 and 36] are directed at protection of the concept of competition as such. They are not directed at the protection of individual competitors, except insofar as the latter may promote the former.

There is no consensus among the courts as to whether purpose involves an objective or subjective test.⁹¹ Whereas a subjective approach was preferred by the High Court in *Magic Millions*⁹² and *Apple Fields Ltd. v. The New Zealand Apple and Pear Marketing Board*⁹³, the Court of Appeal left the question open in *Apple Fields*. In contrast, an objective approach was favoured in *ARA*⁹⁴, *Union Shipping*⁹⁵, and by the High Court and Court of Appeal in *Clear v. Telecom*⁹⁶. Unfortunately, the Privy Council in *Clear v. Telecom* did not directly address the issue, although it did hold that Telecom's conduct was performed for a proscribed purpose on the basis of "its past conduct and certain of its internal memoranda . . ."⁹⁷

In any case, as the High Court in *Clear v. Telecom* stated, the issue of the correct test for §36 is "perhaps academic".⁹⁸ Indeed, for the purposes of this thesis it is not necessary to conclude which test is appropriate for §36 because even where a subjective test has been preferred, both objective and subjective evidence have been employed as proof of purpose.⁹⁹ This is an important result for predatory pricing allegations brought under §36. As the discussion in part III shows, ever since the publication of the A-T test in 1975 there has been an increasing international trend among academics and courts to attempt to evaluate allegations of predation by objective means. Subjective evidence of intent has been de-emphasised to the extent that some courts now consider

⁹⁰ *Union Shipping New Zealand Ltd. & Anor. v. Port Nelson Ltd*, *supra* note 8, at 101,640. See also *New Zealand Magic Millions Ltd. v. Wrightson Bloodstock Ltd*, *supra* note 56, at 101,525.

⁹¹ See *Gault on Commercial Law*, *supra* note 20, at 3-153-3-156.

⁹² *New Zealand Magic Millions Ltd. v. Wrightson Bloodstock Ltd*, *supra* note 56, at 762.

⁹³ *Apple Fields Ltd. v. The New Zealand Apple and Pear Marketing Board* (1989) 2 N.Z.B.L.C. 103,564 at 103,581.

⁹⁴ *Auckland Regional Authority v. Mutual Rental Cars (Auckland Airport) Ltd.*, *supra* note 7, at 647.

⁹⁵ *Union Shipping New Zealand Ltd. & Anor. v. Port Nelson Ltd.*, *supra* note 8, at 709.

⁹⁶ *Clear Communication Ltd. v. Telecom Corp. of NZ Ltd. (HC)*, *supra* note 75, at 198; *Clear Communication Ltd. v. Telecom Corp. of NZ Ltd. (CA)*, *supra* note 75, at 437.

⁹⁷ *Telecom Corporation of New Zealand Ltd. & Ors. v. Clear Communications Ltd*, *supra* note 61, at 21.

⁹⁸ *Clear Communication Ltd. v. Telecom Corp. of NZ Ltd.*, *supra* note 75, at 198.

⁹⁹ *Gault on Commercial Law*, *supra* note 20, at 3-156.

it to be of no practical importance.¹⁰⁰ There exists some justification for such a stance. Objective tests are by no means perfect, but they do hold a comparative advantage over subjective evidence of intent in distinguishing between competitive and anticompetitive pricing behaviour. This advantage arises because objective tests are derived directly from economic theory. Economic theory allows for the identification of the concept which competition law is trying to protect and of the conditions in which predation poses a threat to this concept. Thus, validly derived objective tests should identify only those instances of predation which will be harmful to competition. If only subjective tests of purpose were employed in §36, the advantage provided by objective tests would be lost.¹⁰¹

However, this is not to say that subjective evidence of intent should not be allowed to be considered in predation cases. In part III it was argued that in some circumstances, subjective evidence of intent does have some probative value and it would therefore be a mistake to reject all subjective evidence. The use of such evidence by New Zealand courts in the past is therefore important because it indicates that the courts will be willing to consider subjective evidence of intent in appropriate circumstances.

Due to the lack of any substantive judicial consideration of predatory pricing within New Zealand, the extent to which the New Zealand courts will employ cost-based tests, a test of recoupment, or evidence of subjective intent to identify whether the alleged predation involves a proscribed purpose is unknown. However, the courts' willingness to consider both objective and subjective evidence of intent means that any combination of these tests could be employed. It is submitted that the following cost standard should be employed to determine the purpose behind pricing conduct which is allegedly predatory:

1. Pricing in excess of AC is presumptively lawful.

¹⁰⁰ See comments by Easterbrook in *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, part III, chapter B, section 1, subsection (a), *supra*.

¹⁰¹ This assumes that the objective tests which are necessary for the accurate identification of predatory pricing could not be included within the assessment of the "use" element. It has already been argued that using objective tests for predation within the use element would involve the importation of a pejorative connotation to the evaluation of use (see section 2, *supra*).

2. Pricing between AVC and AC accompanied by other evidence, either subjective or objective, of anticompetitive intent raises a rebuttable presumption of predatory intent.
3. Pricing below AVC creates a rebuttable presumption of predatory intent.

A number of comments must be made about this test. First, it was concluded in chapter B that above-cost predation should not be condemned by §36 because such pricing represented the operation of the competitive process.¹⁰² However, this conclusion was then qualified by the observation that limit pricing strategies will harm workable competition. This qualification means that there should exist some scope for condemning such above-cost strategies. Establishing a presumption of legality for above-cost pricing allows for strategies such as limit pricing to be condemned if sufficient proof of a proscribed purpose exists.

Second, the standard recognises that rigid cost-based tests are fallible. In limited circumstances the possibility exists that pricing below AC and AVC can be legitimate and need not involve an anticompetitive purpose. If the QWI test for “use” were followed, the existence or otherwise of a legitimate business purpose would have been considered within the “use” assessment. However, if the November test for “use” was followed, a rebuttable presumption of anticompetitive purpose allows defendants to provide evidence showing that their pricing involved a legitimate business purpose.¹⁰³

Third, while subjective evidence of intent should not play a primary role in any consideration of the defendant’s purpose, such evidence must be able to be considered irrespective of the price-cost relationship. In particular, the ability to consider such evidence is essential if limit pricing strategies are ever to be condemned. *Prima facie*, firms which are engaging in limit pricing are not pricing anticompetitively. Evidence of subjective intent may be the most obvious indication that above-cost predation is actually occurring. Moreover, because above-cost pricing is involved, it will be much more difficult to refute the defendant’s argument that they are pricing competitively. Documentary evidence of the defendant’s actual anticompetitive intent may be the only

¹⁰² See chapter A, *supra*.

¹⁰³ For examples of potential legitimate business purposes, see text accompanying note 77, *supra*.

way to distinguish between a limit pricing strategy and competitive pricing. As was emphasised during the discussion on the *Brooke Group* decision, statements expressing some vague hostile intent towards competitors deserve to be rejected as proof of an anticompetitive purpose. However, such evidence must be distinguished from evidence which clearly shows that the defendant's conduct was part of a strategy to harm actual or potential competitors (and thereby competition). It is the latter type of evidence of subjective intent which should be able to be presented as circumstantial evidence of a proscribed purpose.¹⁰⁴

¹⁰⁴ If a provision was enacted to remedy the deficiency of §36 with regard to reputational predation engaged in by a non-dominant predator, because no dominance threshold could substitute for a recoupment test, it would be necessary to explicitly test for recoupment to ensure that only successful reputational predation strategies were condemned. Like the dominance test, the recoupment test should be employed as an initial filter. If the provision was structured along the lines of §36 so that anticompetitive conduct performed for the purpose of creating a dominant position was proscribed, the recoupment test would provide contributory evidence of the purpose behind the pricing behaviour. It is submitted that the courts should be able to examine subjective evidence of intent when considering the question of recoupment. A fundamental assumption of the recoupment test (and, for that matter, all cost-based tests) is that firms' conduct is directed by rational decision-makers. If subjective evidence of intent clearly shows the defendant's conduct was part of a predatory strategy, the rationality assumption holds that the alleged predatory conduct would not have been engaged in unless the decision-maker believed that the probability of recoupment satisfied some acceptable level of risk. Therefore, although it should not be determinative of the probability of recoupment, subjective evidence of intent should be allowed to be included as contributory evidence.

Conclusions

From the analysis within the preceding chapters it may be seen that §36, as it is currently drafted and interpreted, can effectively condemn the majority of the predatory pricing strategies which endanger the objectives of the *Commerce Act* 1986. Section 36 therefore represents a formidable weapon which can be employed to attack the potential for anticompetitive harm presented by unilateral predation. This weapon is, however, deficient in one major respect: reputational predation strategies performed by non-dominant firms are excluded from the scope of the section. Whether reputations for predation, or, for that matter, any reputation for responding to entry in an anticompetitive manner, are ever effective in deterring beneficial entry is a moot point. What cannot be argued is the rationality of engaging in such behaviour under certain conditions and the competitive detriment which would occur if such practices were ever successfully employed. The current absence of a provision which prohibits—and thereby deters—unilateral anticompetitive behaviour by firms without market power, means that the possibility that this type of reputational predation is harming society and will continue to do so remains.

The conclusion that §36 is effective in condemning harmful unilateral predatory pricing strategies must also be qualified on another ground. In chapter B it was assumed that socio-political concerns are not relevant to the Act. Unfortunately, as previously explained, the provisions of the Act do not clearly establish any coherent objective. This ambiguity poses significant problems when any organisational behaviour is required to be judged for its effect on society. In assessing the possible harm posed by different types of predatory pricing it was assumed that the objective of the Act is to protect workable competition. It was shown that if this objective is viewed as being equivalent to the maximisation of productive and allocative efficiency then the outcome remains the same. Yet if socio-political concerns are relevant, the conclusion that §36 is effective in condemning harmful predation would most certainly have been

different. While it does little good to dwell on this matter, it must be kept in mind as a qualification.

As currently drafted, §36 can incorporate the contemporary developments in legal standards for predatory pricing. In particular, the framework of the section provides sufficient flexibility to allow for the standard advocated. Although the standard is clearly derived from the United States Supreme Court decision in *Brooke Group*, certain significant modifications were made to allow for differences in construction between the *Commerce Act* and the *Sherman Act* and to remedy perceived deficiencies within the standard provided by the Supreme Court. The outcome is a standard which is tailored to the requirements of the *Commerce Act* and §36 and which has been constructed from the most pertinent contemporary international decisions on predation to combat the range of predatory strategies identified from the contemporary economics literature. If a provision was enacted to prohibit reputational predation strategies performed by predators without dominant market power, it is submitted that the entire range of unilateral predatory pricing strategies which are inimical to workable competition would then be proscribed through the provisions of the *Commerce Act*.

PART V

Conclusion

Conclusion

For decades, antitrust law has evolved through the application of economic theory. As economics has travelled through different paradigms, so too have the antitrust policy-makers and the courts. This is most clearly illustrated in the history of antitrust law in the United States. Ever since the passing of the *Sherman Act* in 1890, United States antitrust policy has been influenced by waves of new “schools of economic thought”.¹ The most recent and currently most prominent is that of the Chicago School. In keeping with Kuhn’s theory on the evolution of science,² each school which preceded the Chicago School has proven mortal. As has been shown, the application of game theory to predatory pricing has falsified irrationality arguments propounded by certain commentators who are principal advocates of the Chicago School.³ Only time will tell whether this “Strategic” school—sometimes referred to as the “‘new’ new learning”, or “post-Chicago” economics—will develop into a separate paradigm and supplant that of the Chicago School.

A necessary condition for any antitrust economics paradigm is that its theories must be able to be applied to practical situations in the courts. In this respect, the Chicago School may be sowing the seeds of its own destruction. With regard to predatory pricing, the Supreme Court’s general scepticism towards the plausibility of this behaviour expressed in *Matsushita Electric Co. v. Zenith Radio Corp.*⁴ and *Cargill, Inc. v. Monfort of Colorado, Inc.*⁵ is clearly attributable to Chicago School learning. This scepticism manifested itself in the creation of a requirement that alleged instances

¹ Hovenkamp has identified no less than six schools of thought—common law, rule of reason, monopolistic competition, workable competition, liberal, and Chicago—which have influenced United States antitrust policy and adjudication since the passing of the *Sherman Act* (Hovenkamp, H., “Antitrust Policy After Chicago.” *Michigan Law Review*, 84(1), 1985, 213-284, at 213-214).

² Kuhn, T.S., *The Structure of Scientific Revolutions* (2nd ed.). Chicago: University of Chicago Press, 1970.

³ See part II, chapter B, section 2 & 3, *supra*.

⁴ *Matsushita Electric Co. v. Zenith Radio Corp.* 475 U.S. 574 (1986).

⁵ *Cargill, Inc. v. Monfort of Colorado, Inc.* 479 U.S. 104 (1986).

of predation be proven to be rational. The Supreme Court's judgment in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*⁶ does nothing to alter this position. However, the rationality of business conduct is the domain of game theory and having invited this visitor into the house, the Chicago School now faces the prospect of being evicted.

With respect to predatory pricing, the process of supplanting the influence of the Chicago School has begun but it is only in its early stages. There currently exist a number of problems which prevent the game-theoretic models from being successfully introduced to the courts as a theory upon which liability should be adjudicated. First, the current game-theoretic predation theories are insufficiently generalisable to accurately predict the outcome from any specific set of facts. While the game-theoretic models do incorporate the effects of a number of aspects of reality which conventional microeconomics are incapable of analysing, the models are still extremely simplistic with respect to the multitude of factors existing in reality which impinge on the rationality of business conduct. For example, the optimality characteristics of predatory strategies have been found to be extremely susceptible to variations in the informational conditions of the environment. Even if it was assumed that the current game-theoretic models do incorporate all relevant variables, the information characteristics of a market would need to be identified precisely and the model be robust before a confident conclusion could be reached regarding the legality of the alleged predation.

Second, current technology is incapable of satisfying the evidential requirements of a game-theoretic predation theory. This problem follows from these models' present lack of generalisability. In order to accurately predict the outcome of any specific allegation of predation through game-theoretic analysis, the information environment and the timing of players' actions would have to be precisely identified. Within the adversarial setting of the courtroom, it is often extremely difficult to determine who did what and when. To precisely determine who *knew* what and when would be a Herculean task even in the most simple of cases.

⁶ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.* 1993-1 Trade Cases ¶70,277.

Third, a fundamental premise of game-theoretic analyses of predation is that the harm to society from such conduct accrues only when the predatory behaviour will be successful in maximising long-run profits. This assumption represents a significant problem for the application of game-theoretic models in practice. While successful predation will always harm allocative efficiency, where additional objectives are relevant to competition legislation, harm to the attainment of these objectives will not necessarily be restricted to successful predation. For example, the multiplicity of objectives relevant to the *Treaty of Rome* will not only be threatened by successful predation. Therefore, unless the scope of the game-theoretic models can be expanded to incorporate additional concerns, the models will be underinclusive where the harm alleged relates to the attainment of objectives other than allocative efficiency.

Finally, the highly abstract, sophisticated, mathematical game-theoretic models must be translated into theories which can be comprehended by the courts. The mathematical basis of game theory is probably its most important benefit; however, in front of judges untrained in this highly complex field of microeconomics, this benefit is likely to transform into a significant liability. As one commentator has noted, “[i]f game theory insights are to significantly alter judicial analysis of exclusionary conduct, it first will be necessary for the literature to be translated into what Judge Stephen Breyer has termed ‘antitrust lingo’.”⁷ More than any other difficulty, it is probably because of this problem that the game-theoretic predation literature has never been cited within a predatory pricing case.⁸

In addition to the preceding problems, there may be other difficulties which would require solutions before game-theoretic predation models could be relied upon as a theory upon which liability should be assessed. Nevertheless, simply because game-theoretic models cannot be employed in this capacity does not mean that they are currently valueless within the judicial environment. At this point in its development, game theory can be employed as a conceptual tool rather than a computational tool.⁹ It

⁷ Kovacic, W.E., “The Influence of Economics on Antitrust Law.” *Economic Inquiry*, 30, 1992, 294-306, at 299 (citations omitted).

⁸ See part II, chapter B, section 3, footnote 61, *supra*.

⁹ See Shubik, M., “Game Theory, Law, and the Concept of Competition.” *Cincinnati Law Review*, 60, 1991, 285-303.

is probable that game-theoretic predation models will be first introduced to the courts to refute general arguments that predation is almost always irrational behaviour. For example, a defendant may attempt to establish a sceptical attitude in the mind of the judge towards predatory pricing by invoking any number of irrationality arguments. On such an occasion, the plaintiff could rebut these arguments by conveying the insights provided by game-theoretic analyses of predation to the court. In particular, it should be emphasised that game theory has shown that the irrationality arguments are premised on the fundamental (and dubious) assumption of a perfect information environment and that the analytical tools provided by conventional economics upon which these arguments are based are inadequate to evaluate the dynamics of predation. In this regard, the reputational predation and Deep Pocket predation models are likely to be the most influential because they falsify some of the more prominent irrationality arguments and (even if the mathematical proofs are complicated) the essence of these models is not difficult to describe.

In *Cargill, Inc. v. Monfort of Colorado, Inc.*¹⁰ the United States Supreme Court refused to accept the Bork-McGee-Easterbrook hypothesis that predatory pricing should be *per se* legal because the costs of proscription exceed the benefits. Similarly, the willingness of the E.E.C. Court of Justice and the Australian Federal Court to hear allegations of predation constitutes an implicit rejection of these arguments. New Zealand will inevitably adopt the same stance. Therefore, given that predatory pricing must be proscribed, the question which must be asked is: *How* should predatory pricing be proscribed?

Perhaps the most important lesson of the comparison of contemporary judicial analyses of predation conducted in part III is that no standard will necessarily be appropriate for all jurisdictions. The optimal standard can only be identified after the objectives of the jurisdiction's competition legislation and the types of predatory pricing which will be inimical to the attainment of these objectives are known. It is for this reason that the recoupment test is relevant in the United States yet is inappropriate

¹⁰ *Cargill, Inc. v. Monfort of Colorado, Inc.*, *supra* note 5, at 121-122.

within the E.E.C. Similarly, this reason allowed the Commission of the European Communities to legitimately argue that cost-based tests should not be determinative of liability while on the other side of the Atlantic the United States Supreme Court decided to exclude above-cost pricing behaviour from the definition of predatory pricing.

When the conduct of predatory pricing was considered in the context of the *Commerce Act* 1986, it was concluded that only successful predation deserved proscription. This conclusion was premised on the assumption that the objective of the Act is the promotion of workable competition as either an end in itself or to maximise the sum of productive and allocative efficiency. However, the objectives of the Act are ambiguous. If socio-political concerns are relevant to the Act, then both successful and unsuccessful predatory strategies deserve condemnation and the conclusions of part IV regarding the efficacy of §36 in proscribing predation will not be valid. Nevertheless, there appears little support within New Zealand among either jurists or competition law commentators that socio-political concerns are directly relevant to the *Commerce Act*. The conclusion that the Act should only proscribe successful predation therefore seems to be justified.

Section 36 of the *Commerce Act* does not proscribe specific types of anticompetitive behaviour but rather is a general provision which prohibits any behaviour performed by dominant firms for particular anticompetitive purposes. This generality enhances its efficacy in accurately identifying and proscribing harmful predatory strategies by providing sufficient flexibility to enable the section to envelop the diverse range of harmful predatory strategies. Such flexibility is particularly important in light of the increasing volume of articles which are introducing—and proving the rationality of—a great array of intricate anticompetitive business strategies.

However, in addition to the flexibility of §36 providing a benefit, this characteristic could also prove to be a liability by causing the section to be overinclusive and thereby condemning instances of vigorous, yet competitive, conduct. This danger of overinclusiveness is particularly acute with respect to predatory pricing behaviour because of the difficulty in distinguishing between competitive and predatory price reductions. Therefore, the flexibility of §36 could actually diminish the efficacy of the

section with regard to proscribing harmful predatory pricing. Counteracting this predisposition for overinclusiveness, however, is the fact that no specific tests are provided within the section to identify what conduct falls within the proscribed purposes in §36(1)(a)–(c) and therefore the onus is on the courts to frame effective tests. By allowing the courts to frame the tests of illegality, these tests are able to evolve to incorporate the most recent developments in judicial standards for identifying predatory pricing with greater speed than if the tests had been specified within the Act. Thus, there is a higher probability that the standards of illegality used to assess any particular allegation of predation will be the most effective for that jurisdiction given the state of knowledge on the subject at that point in time.

As predatory pricing is yet to have been the subject of judicial consideration in New Zealand, the standard of illegality which applies in this country for such behaviour remains to be seen. On the basis of the contemporary economic and judicial analyses of predation examined in parts II and III, it was submitted in part IV that the most appropriate standard for identifying predatory pricing within the New Zealand context involved a two-tiered investigation. The first tier consists of a recoupment test. This will ensure that only those allegations of predation which have a reasonable probability of being successful be proscribed. In practice, the dominance threshold held within §36 will act as an effective substitute for the examination of recoupment. The second tier—to be conducted under the purpose limb of §36—serves to distinguish between instances of actual predation and vigorous price-cutting. The following cost-based tests were submitted as representing the most appropriate and effective means for achieving this task in the context of §36:

1. Pricing in excess of AC is presumptively lawful.
2. Pricing between AVC and AC accompanied by other evidence, either subjective or objective, of anticompetitive intent raises a rebuttable presumption of predatory intent.
3. Pricing below AVC creates a rebuttable presumption of predatory intent.

The preceding standard should be viewed as an embodiment of the numerous conclusions reached throughout the analytical process followed in this thesis. The mere existence of the standard reflects the conclusions reached in parts II and III that

predation does pose a danger to society, that when analysed from a contemporary economic perspective, predation constitutes rational organisation behaviour under a wider range of conditions than had been previously accepted, and that although it is an unanswerable empirical question as to whether the benefits of proscription exceed the costs, the weight of subjective opinion lies in favour of proscription. Furthermore, the unique form of the standard is reflective of the conclusion reached in part IV that there need not exist a standard which is universally appropriate in all jurisdictions. Rather, the form of a standard is context specific and must be derived directly from the objectives of the competition legislation that applies within the jurisdiction. Following this rule of construction, the advocated standard was only proposed after the types of predation which posed a danger to the attainment of the objectives of the Act had been identified. Finally, it was concluded that, in general, the manner in which §36 is drafted and interpreted did not reduce the efficacy of the section in proscribing harmful predation. This allowed the advocated standard to be justifiably integrated within the §36 framework.

Section 36 can be effective with regard to the proscription of harmful predatory strategies in all but one respect. This exception relates to instances of successful reputational predation performed by non-dominant predators. As was recognised, very little empirical evidence exists to support or refute the proposition that a predatory reputation can ever act by itself as an effective barrier to entry. Nevertheless, if such a strategy were ever engaged in, it would be contrary to the achievement of the Act's objectives and therefore it is submitted that the enactment of a new provision to proscribe such behaviour is justified.

The standard of illegality for predatory pricing which is advocated has been constructed for the New Zealand environment with explicit regard to contemporary economic and judicial analyses of this form of organisation behaviour. Whether the courts ultimately adopt the logic underlying the standard is ascribed to the future. It is submitted, however, that the standard represents the optimal framework for the identification of predation within New Zealand and if employed—with the exception of reputational predation performed by non-dominant firms—§36 will constitute an effective instrument for proscribing harmful unilateral predatory pricing strategies.

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Naturally, I am entirely responsible for the opinions expressed in this thesis and any residual errors and/or omissions.

Yoon San Wong

University of Canterbury, 1994

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