The Ambiguity of Predatory Pricing: Strategy as a Clarifier

Author: Richard Lindberg
Tutors: Rikard Larsson and Cécile Brokelind
Executive summary

Ever since the phenomenon of predatory pricing came under the antitrust radar in the Standard Oil case it has spurred debate, which was accentuated after McGee’s seminal article in 1958 where he reexamined the Standard Oil case and claimed that no predatory pricing had taken place. He was supported by a number of scholars (the Chicago school) and legal commentators who stated that predatory pricing was an irrational strategy and therefore its existence was questioned. Other researchers focused on the economic side and came up with cost analysis approaches like the Areeda-Turner test. This cost based approach was adopted by US courts and later on, EC courts. The past 20 years have seen the introduction of game theory concepts and some researchers even desire more advanced approaches where historical, structural and performance tests are applied. At the same time the US Supreme Court has taken the view that predatory pricing is very rare while the ECJ has taken a more analytical approach, mainly because of the different competition policy goals that are enshrined in the Treaty, namely the concern about single market integration, protection of competitors and the viability of smaller businesses, as opposed to the US where efficiency is the main criterion. There is little agreement on the details on how to deal with predatory pricing, the debate centers around what cost measure to use, if recoupment should be used as a prerequisite, what kind of structural test can be used and if the negatives outweigh the benefits of lower prices. What has become clear despite the transatlantic rift is that a purely cost-based approach will not be enough as it doesn’t recognize the complexity of predatory pricing business strategies, for example the use of cross-subsidization. This thesis is a mix between a traditional research paper and a research synthesis. To confer a comprehensive and unbiased view of the ongoing controversy the author has collected data from reports, newspapers, Internet journals and websites, research papers, academic journals and statements from actors involved in the ongoing development. The intent and purpose of this thesis is to give a wide overview of the phenomenon of predatory pricing from a three sided approach using economics, business law and business strategy. The underlying questions in the thesis detail if predatory pricing is rare or common and if there is a trade-off between efficiency and competition when applying business law. The proposed strategic analysis incorporates the elements suggested by the scholars who introduced the structural test approach and then furthers the analysis by use of additional strategic concepts. This kind of test can be useful for both acquittal and conviction of predatory pricing conduct given the legal parameters in existence. The business strategy section will entail concepts like game theory, industry analysis, resource & capabilities, competitive advantage, strategic pricing and corporate strategy. A workable model to predatory pricing assessment should combine a first test of industry analysis and strategic considerations to decide whether predatory pricing is indeed possible and probable and a second test should if needed include price cost analysis, tailored to the industry characteristics which often is hard to establish but with the detailed industry analysis from the first test it should be considerably easier to find the right cost measure. Judgments should be based on a combination of measures applied to the facts of a particular case. The assessment should consider; industry structure, predatory intent, cost issues, the likelihood of recoupment, and possible business justification. The complexity of economic analysis and application of business law can therefore be saved for the most rampant cases of predatory pricing. Key words: Predatory pricing, cross-subsidization, competition, strategy, industry analysis and cost measures.
Preface

The past few months I have been consumed by predatory pricing, which has culminated in this thesis. At the same time it has been a very interesting and informative process. It gave me the opportunity to combine personal interest with academic knowledge accumulated during my university years. The topic of the thesis concerns a phenomenon that has perplexed the academic, business and legal community for more than a 100 years and the debate show no signs of dying down. It is an important topic as it has immense implications for companies, individuals and society in general.

This thesis has been a solo effort in terms of the physical writing process but I have had help from several sources in the idea process and throughout the course of the work process. Without them I might have missed interesting directions and theories. I would like to thank my tutors, Rikard Larsson and Cécile Brokelind who provided me with insightful comments and constructive criticism. Furthermore I would like to thank Sven Norberg at DG Competition in Brussels, William L. Anderson at Frostburg State University, Kenneth Fjell at the Norwegian School of Economics and Business Administration, Robert Jackson at the Canadian Competition Bureau, William Kolasky at the United States Mission to Europe and Cato policy institute for their helpful contributions.

Lund, May 2004

Richard Lindberg
# Table of contents

## 1 Introduction ................................................................................................. 7
   1.1 Background ................................................................. 7
   1.2 Problem discussion ....................................................... 12
   1.3 Purpose ............................................................................. 15
   1.4 Target Audience ........................................................... 16
   1.5 Delimitations ................................................................. 16
   1.6 Structure and disposition ............................................... 17

## 2 Methodology ................................................................................................. 18
   2.1 Introduction ........................................................................ 18
   2.2 Empirical framework ....................................................... 18
      2.2.1 Approach ................................................................. 19
      2.2.2 Work process .......................................................... 20
   2.3 Theoretical framework .................................................... 21
   2.4 Data collection ............................................................... 22
      2.4.1 Primary data ............................................................ 22
      2.4.2 Secondary data ......................................................... 22
   2.5 Criticism of sources ....................................................... 23
   2.6 Frame of reference ......................................................... 24
   2.7 Method of analysis ......................................................... 25

## 3 Theory ........................................................................................................... 26
   3.1 Economics ........................................................................ 26
      3.1.1 Perfect competition .................................................. 27
      3.1.2 Monopoly ................................................................. 28
      3.1.3 Oligopoly ................................................................. 29
      3.1.4 Monopolistic competition ....................................... 29
      3.1.5 Cost measures .......................................................... 30
         3.1.5.1 Market Conditions ........................................... 31
         3.1.5.2 Barriers to entry and re-entry ............................ 31
         3.1.5.3 Financial requirement ...................................... 32
         3.1.5.4 Recoupment ....................................................... 32
      3.1.6 Assessment theories for predatory pricing ............... 33
         3.1.6.1 No rule theory .................................................... 34
         3.1.6.2 Price-cost tests ................................................ 34
         3.1.6.3 Performance tests ............................................. 35
         3.1.6.4 Rule of reason tests ......................................... 36
         3.1.6.5 Structural tests ............................................... 36
      3.1.7 Non-price predation .................................................. 37
   3.2 Business strategy ............................................................. 38
      3.2.1 Game theory and signalling effects ......................... 38
         3.2.1.1 Increasing returns –first mover advantage .......... 39
      3.2.2 The Concept of strategy ........................................... 41
      3.2.3 Analyzing the industry environment ....................... 41
         3.2.3.1 Five Forces ...................................................... 42
         3.2.3.2 Key success factors .......................................... 47
3.2.3.3 Competitor analysis ................................................................. 47
3.2.3.4 Segmentation analysis ............................................................... 48
3.2.4 Resources and capabilities ......................................................... 48
3.2.5 Competitive advantage .............................................................. 49
3.2.6 Strategic Pricing ........................................................................ 51
3.2.7 Industry life cycle strategies (industry evolution) ....................... 53
3.2.8 Corporate strategy ...................................................................... 55
3.2.8.1 Multinational strategies ......................................................... 55
3.2.8.2 Mergers .................................................................................. 57
3.3 Business law .................................................................................. 58
3.3.1 The characteristics of competition .............................................. 58
3.4 Chapter summary .......................................................................... 61

4 Empirical findings ........................................................................... 62

4.1 Concept of predatory pricing ......................................................... 62
4.2 Predatory pricing in different industries ........................................ 62
4.3 Cross-subsidization ....................................................................... 63
4.3.1 Legal framework in the cross-subsidization field ......................... 66
4.3.2 Cross-subsidization as part of the predatory concept .................. 67
4.4 Relevant legislation ...................................................................... 70
4.4.1 EC legislation ............................................................................ 70
4.4.1.1 Dominant position ................................................................. 70
4.4.1.2 Abuse .................................................................................... 72
4.4.2 US legislation ........................................................................... 73
4.4.2.1 Sherman Act .......................................................................... 73
4.4.2.2 Federal Trade Commission Act .............................................. 74
4.4.2.3 Clayton Act ........................................................................... 74
4.5 Case law ....................................................................................... 75
4.5.1 EC Case law ............................................................................ 75
4.5.1.1 Akzo ..................................................................................... 76
4.5.1.2 Tetra Pak II ........................................................................... 78
4.5.1.3 Irish sugar ............................................................................ 79
4.5.1.4 Compagnie Maritime Belge (CEWAL) .................................... 80
4.5.1.5 Wanadoo .............................................................................. 81
4.5.2 US case law ............................................................................ 83
4.5.2.1 Utah Pie ............................................................................... 83
4.5.2.2 Matsushita ........................................................................... 84
4.5.2.3 Cargill .................................................................................. 84
4.5.2.4 Brooke Group ...................................................................... 85
4.5.3 Summary .................................................................................. 85
4.6 Recent developments in the EU and US ........................................ 85
4.6.1 EU ........................................................................................... 85
4.6.1.1 Deutsche Post AG ................................................................. 85
4.6.1.2 Michelin II ........................................................................... 86
4.6.1.3 British Airways ................................................................. 86
4.6.1.4 Draft notice on the application of the competition rule to anticompetitive practices in air transport 87
1 Introduction

In this chapter the reader will be introduced to the area of the thesis and the problems to be analyzed. The purpose of the thesis will be presented as well as discussions regarding target audience and delimitations. At the end, a visualization of the intended structure will give the reader the chance to see how the author visualizes the flow and structure of the thesis.

1.1 Background

Predatory pricing is one of the oldest and most classic big business conspiracy theories and continues to be so today, the phenomenon automatically incurs images of a big company trying to rid itself of any competitors, the term almost implies guilt. It became popularized in the late 19th century by journalists who derided John D. Rockefeller of the Standard Oil Company for the business practice of setting allegedly low prices (predatory pricing) in the petroleum-refining business, forcing smaller competitors to exit the market.

The predatory pricing concept can be described as follows:¹ The firm alleged of predatory conduct first lowers its price below the average cost of its competitors. In response the competitors then lower their prices below average cost, thereby incurring losses on each unit sold. Not cutting price could result in losing market share; if they cut prices, they could eventually go bankrupt. After reducing or eliminating the competition, the predatory firm can raise its price and compensate itself for the money it lost while engaging in predatory pricing, and earns monopoly profits in the long run. The theory implies that some method exists for the predator to outlast its victim(s), for example through entry barriers like greater cash reserves, better financing or cross-subsidization from other markets or other products. Either the threat of a low pricing policy or the reputation of the firm for predatory behaviour can be sufficient disincentives to deter new entrants.

Although the theory of predatory pricing has evolved during the 100+ years it has “existed” all analysts and scholars have not accepted it as a valid business concept. These non-believers claim that research over the past 45 years has shown that predatory pricing as a strategy for monopolizing an industry is irrational. There are no examples of monopolies created by predatory pricing, furthermore they believe that claims of predatory pricing are generally made by competitors, unwilling or unable to cut their own prices because they are less efficient. Legal restrictions on price-cutting therefore cause more harm than good, both for businesses and consumers.

It is still a popular legal and political theory for several reasons. Vast sums of money are involved in predatory pricing litigation, guaranteeing that antitrust institutions will scrutinize allegations of predatory pricing. It often involves huge corporations as they have the finances to engage in this

¹ There are numerous definitions of predatory pricing, many that will be discussed later in the thesis, the one used in the introduction represents the most commonly used definition. Source: DiLorenzo, T “The myth of predatory pricing”, (1992), Cato Policy Analysis, nr 169, accessed from: http://www.cato.org/pubs/pas/pa-169.html 15/05/04
costly strategy.\textsuperscript{2} It has political undertones as well as it can be used as a tool to accuse foreign companies of trying to unlawfully take over domestic firms or completely drive them out. Dumping claims are rampant and often invoke protectionist measures from domestic legislators. Consumer action groups and other political groupings also use predatory pricing accusations to discredit capitalism and “big business” in order to promote more governmental control. Price increases are seen as greed and price cuts as intent to drive out competitors and gain monopoly. Even when prices remain constant there are allegations of price-fixing.

The classic article on predatory pricing was written by economist John McGee in 1958 where he examined the famous 1911 Standard Oil antitrust decision that required John D. Rockefeller to divest his company, because of the monopoly situation and predatory pricing claims among other issues. McGee contended that Standard Oil had not engaged in predatory pricing since this would have been irrational, because of the huge cost involved and the risk of price wars (which could also spread to surrounding markets) where no time frame for recoupment was foreseeable. For predatory pricing to seem rational, the rate of return on predation must be higher than the market rate of interest or the expected rate of return on any other investment the predator might make (opportunity cost). Furthermore he claimed that if a firm would end up with a monopoly and earn healthy profits this would attract new competition. The requirement that a firm engaging in predatory conduct have a considerable war chest of capital at its disposal for cross-subsidization purposes was also criticized since it was questioned how a firm could build up a war chest without already being a monopoly. He dismissed the emotional rhetoric that led to allegations of predatory conduct.

For a long time McGee's analysis provided the only coherent economic theory of predatory pricing. While some resisted McGee’s conclusion that predatory pricing was irrational, no rival theory emerged. However, examples of actual predation clearly existed. Among the most notable was the use of “fighting ships” to exclude shipping rivals, as for example in the famous Mogul Steamship Co. case, as described by B.S. Yamey.\textsuperscript{3} The theory of predation came under strong attack by a number of other writers including Areeda\textsuperscript{4}, Bork\textsuperscript{5} and Easterbrook\textsuperscript{6}. Easterbrook argues that the victim should have a variety of sources of aid either through the capital markets or through being acquired by its own financially strong backer. Easterbrook discusses the unfavourable mathematics of a predatory campaign, noting that both present losses and foregone present profits must be earned back by monopoly profits and that, given discount rates and the uncertainty of those profits, predation seemed unlikely to be profitable. Easterbrook goes on to discuss the possibility that predation in one market could be used to create a reputation in other markets, that predation is a signal to competitors and potential entrants in other markets not to

\textsuperscript{2} During the 1970s AT&T estimated that it spent over $100 million a year defending itself against claims of predatory pricing. It has been estimated that the average cost to a major corporation of litigating a predation case is $30 million. Source: DiLorenzo, T “The myth of predatory pricing”, (1992), Cato Policy Analysis, nr 169, accessed from: http://www.cato.org/pubs/pas/pa-169.html 15/05/04

\textsuperscript{3} Bolton, P, Brodley, J & Riordan, M “Predatory pricing: Strategic theory and legal policy”, (1999) Center for Economic research, nr 9982, p 8

\textsuperscript{4} Areeda, P & Turner, D F “Predatory pricing and related practices under section 2 of the Sherman Act” (1975) Harvard Law Review nr 88. The authors share the Chicago School’s view that predatory pricing is rare but should be dealt with since there is risk of reduction in competition.

\textsuperscript{5} Bork, R H “The Antitrust Paradox”, New York, NY 1978

enter or compete vigorously. He finds the argument not persuasive because the original threat to predate is not credible. Easterbrook’s criticism of the credibility of a threat to predate in multiple markets follows from work by Selten, who used game theory to demonstrate how rational players could unravel threats of predation in multiple markets. Selten called the result of this reasoning the “Chain Store Paradox” because people seem to believe intuitively that predation should pay while the logic of game theory says it shouldn’t. Later writers resolve Selten's paradox by showing that the logic of his game theory holds only for multiple markets with perfect information, that is, each potential entrant knows that it is not in the interest of the monopolist to fight.\textsuperscript{7}

The Chicago economists with McGee, Easterbrook, Bork and later on DiLorenzo\textsuperscript{8} and Boudreaux\textsuperscript{9} represent one extreme end of the predatory pricing discussion, they claim that the phenomenon is so rare that legislation is not necessary (the no rule approach). In the middle there are commentators and scholars who also believe it to be rare but since there is a chance of reduction in competition some test and rules are necessary. This “school” is represented by Areeda & Turner who proposed a test (later known as the Areeda-Turner test) where predatory pricing is deemed unlawful if prices are below some measure of cost (Average Variable Cost). This test focuses on short term behaviour and has been criticized for this very fact by researchers like Martinez\textsuperscript{10} claiming that long term cost based rules are needed so the long term implications can be analyzed. The cost based rules have also been questioned as being insufficient and scholars like Williamson\textsuperscript{11} and Baumol\textsuperscript{12} have called for performance tests where the analysis focuses on the firm’s behaviour after the rivals have exited the market. Another view is that by looking at the historic behaviour of the firm a prediction of intent and future behaviour can be surmised, this is known as the rule of reason approach, advocated by Martinez in his long term approach. A more integrative model, the structural test approach as exemplified by Joskow & Klevorick\textsuperscript{13} has understood the difficulties of only using economics and law to analyze the problem by calling for a two-tier test. First the analysis looks at market characteristics and then if needed a price-cost test is applied. The commonality of these different approaches excluding the no rules approach is that try to find a balance between fair competition and minimal interference in business practices, i.e. a balance between economics and law. A key premise in developing an enforcement policy for predatory pricing is the expected frequency and severity of its occurrence.

\textsuperscript{7} OECD publications, “Predatory Pricing”, p 11, Paris, 1989
\textsuperscript{8} DiLorenzo, T “The myth of predatory pricing”, (1992), Cato Policy Analysis, nr 169
\textsuperscript{9} Boudreaux, D J “The problem with predation” (1998), Competitive enterprise institute accessed from: http://www.cei.org/gencs/005/2C01223.cfm 15/05/04
\textsuperscript{10} Martinez, L M “Predatory pricing literature under European competition law: The Akzo case” (1993) Legal issues of European Integration, vol 2
\textsuperscript{11} Williamson, O “Predatory pricing: A strategic and welfare analysis” (1977) Yale Law Journal nr 87. Predation will not necessarily reduce welfare. Using models that assumes complete information rivals can make decisions without bias, enabling a more efficient market to function. Rivals will only remain if it is cost-effective and profitable to do so, for example if demand is very low, it may only be efficient for one firm to supply the market as discussed in the economic theory section under the monopoly headline. Simple rules that rely on indiscriminate use of information will be erroneous by protecting inefficient firms. The efficiency gain of eliminating welfare-reducing predation may not be sufficient to warrant antitrust law on predation dependent on the cost of the errors. As referenced by Bolton, P, Brodley, J & Riordan, M “Predatory pricing: Strategic theory and legal policy”, (1999) Center for Economic research, nr 9982
\textsuperscript{12} Baumol, W “Quasi performance of price reductions: a policy for prevention of predatory pricing” (1979) Yale Law Review, nr 89
\textsuperscript{13} Joskow, P & Klevorick, A “A framework for analyzing predatory pricing policy” (1979) Yale Law Journal, nr 89
That determination necessarily rests on the twin guides of empirical evidence and economic theory. Moving to the other extreme end of the discussion analysts and researchers like Edlin who claim that predatory pricing exists and should be legislated against even at above-cost levels because established rivals can set price and cost level high enough to make new entrants suffer from an artificially high cost level, depriving them of needed cash flow at the onset. This approach has been heavily criticized by other analysts and researchers like Elhauge who feel that this would seriously interfere with justifiable business practices and penalize efficient firms. Legislative proposals in the US and Europe have incorporated some elements of the above-cost approach but are by no means as far-going as Edlin proposes.

The older economic analysis is challenged in a more fundamental way by developments in economic theory over the last 20 years. Stimulated by the growing number of observed instances of predatory pricing and the emergence of modern game theory which provided the tools to analyze complex strategic situations, economists developed new economic theories beginning in the early 1980’s. This new body of research challenges the static framework of perfect information on which McGee had relied. The new analysis explains predatory pricing in a dynamic world of imperfect and asymmetric information in which strategic conduct can be profitable. Under this analysis the predator seeks to influence the expectations of an existing rival, a potential rival, or perhaps most striking of all, the prey’s creditors, to convince the rival that continued competition or future entry into the market will be unprofitable by sending said signals. Signaling theories include reputation effect, test market and signal jamming and cost signaling. In reputation effect predation a predator reduces price in one market to induce the prey to believe that the predator will cut price in its other markets or in the predatory market itself at a later time. In test market and “signal jamming” the prey is attempting to ascertain consumer response to a new product or to its entry into a new geographic market. In cost signaling a predator drastically reduces price to induce the prey to believe that the predator has lower costs, when in fact the predator has no cost advantage. There are three core elements which are common to all predatory pricing definitions: the predator behaves in a way which, in the short run, is not optimal and which is only rational strategically, by reason of reduced competition in the future; the behaviour has the effect of reducing or eliminating competition; the predator benefits from the reduction in competition in the long run through added market power.

Even though there have been hundreds of federal antitrust cases in the US based on claims of predatory pricing, economists and legal scholars have to this day failed to provide an unambiguous example of a single monopoly created by predatory pricing. A study by Koller in the early 70’s showed that before 1970 more than 120 federal antitrust cases in which predatory pricing was alleged had been brought under the 1890 Sherman Act. Ninety-five of those cases resulted in convictions, even though in only 26 of the cases was there a trial that “produced a

factual record adequate for the kind of analysis employed”, many of the defendants decided it was cheaper to plead guilty than to defend themselves. Koller established the following criteria for independently determining whether a monopoly was established by predatory pricing: Did the accused predator reduce its price to less than its short-run average total cost? If so, did it appear to have done so with a predatory intent? Did the reduction in price succeed in eliminating a competitor, precipitating a merger, or improving “market discipline”? Employing those criteria for determining predatory behavior, Koller found that below-cost pricing “seems to have been at least attempted” in only seven cases. Even in the cases where a competitor seemed to have been eliminated by low prices, "in no case were all of the competitors eliminated." Thus, there was no monopoly, just lower prices. Three cases seem to have facilitated a merger, but mergers are typically an efficient alternative to bankruptcy, not a route to monopoly. In those cases, as in the others, the mergers did not result in anything remotely resembling a monopolistic industry. But a more recent study by Zerbe and Cooper examining the same cases concluded that predatory pricing was more prevalent than Koller had shown.

The lack of evidence of predatory pricing, moreover, has not gone unnoticed by the U.S. Supreme Court. In Matsushita Electric Industrial Co. v. Zenith Radio (1986), the Court demonstrated knowledge of the above-mentioned research in declaring, effectively, that predatory pricing was about as common as unicorn sightings. The Court also noted that "the success of such schemes is inherently uncertain: the short-run loss is definite, but the long-run gain depends on successfully neutralizing the competition." The Court continues, "There is a consensus among commentators that predatory pricing schemes are rarely tried, and even more rarely successful." Since predatory pricing schemes "require conspirators to suffer losses in order eventually to realize . . . gains," the Court concluded that "economic realities tend to make predatory pricing conspiracies self-deterring." More recent cases like the Brooke decision has cemented this view and even questioned its existence, they have adopted the recommendations of the Chicago school of thought.19 The absence of cases, may reflect the allocation of enforcement priority to other types of anticompetitive behaviour, evidentiary challenges in assembling a predation case, problems in designing effective legal rules to address predation or some combination of these factors.20 In the EU the frequency of predatory pricing claims have been concentrated to the mid 80’s and onwards since there was no proper definition of predatory pricing in the EU before the AKZO case21. Since then, several cases have been presented to the Courts, the CFI (Court of First Instance) and ECJ (European Court of Justice) and several other investigations have been initiated by the Commission. The EU has adopted a different approach to the phenomenon, the recoupment prospect is not necessary in order to prove predatory pricing, intent and risk of reduction in competition are overriding goals. The cases analyzed in this thesis have been selected on the basis of importance to the development of predatory pricing theory and also includes the latest cases and decisions. The choice of cases were based on previous research and also from suggestions derived from email interviews performed for this thesis. The contribution of this thesis lies in extending the case analysis and provide new perspectives. Main source for case selection is Barthel, C “Predatory Pricing policy under EC and US law”, (2002).

1.2 Problem discussion

“The attempt to reduce or to eliminate predatory pricing is also likely to reduce or eliminate competitive pricing beneficial to consumers.”  --Harold Demsetz

Predatory pricing poses a dilemma that has perplexed and intrigued the antitrust community for many years. On the one hand, history and economic theory teach that predatory pricing can be an instrument of abuse, but on the other side, price reductions are the hallmark of competition, and the tangible benefit that consumers perhaps most desire from the economic system. Predatory pricing theory fails to recognize that price-cutting (even below average cost) is a normal activity in competitive markets. This because the theory is derived from the perfect competition model of economic theory and does not see competition as dynamic rivalry. Cutting prices below cost can be a way for a new business to break into a market or for older, more established businesses to grab a larger market share. As Hayek said, competition is a “discovery procedure”, a firm does not automatically use costs as basis for setting price, value for the customer can be the overriding goal. There are numerous reasons for price-cutting. Sellers may be meeting competitors’ price cuts, discounting their prices as a way of introducing their new and unknown products to consumers, selling perishable or obsolescent goods, or there might be excess capacity. The divergent theories regarding predatory pricing span from commentators advocating no rules, those who want to use different cost based tests, others who desire performance and rule of reason tests and finally those who opt for a more multilayered approach, the structural tests. This divergence is responsible for the differing view on the phenomenon in the legislative arena. The reason for why the academic world and practitioners disagree is because they take a narrow look at the problem, often only from their own perspective, a vast majority of the work done on this subject analyses the concept either from a legal perspective, a business perspective or an economic perspective, sometimes two perspectives are used but seldom if ever are the three areas used in conjunction to offer a better view of what is going on and why. This thesis tries to facilitate understanding between the different perspectives that law, economics and business strategy imply.

The issue of predatory pricing is contentious; there is a fear that if the Courts go to far in prohibiting this it could reduce price competition. The following quote accurately sums up the problem at hand; “Price competition is the essence of free and open competition. It favours more
efficient firms and it is for the benefit of consumers both in the short and long run. Dominant firms not only have the right but should be encouraged to compete on price”. It calls for both efficient firms and consumer protection and that a company has to be dominant to be caught by existing regulation. That means there are many regulatory hurdles to be scrutinized before a company can be judged to engage in this kind of behaviour. Long term objectives for companies and consumers are sure to clash as consumers want low prices and companies look for market share and the ability to control the pricing structure in the market. Low prices are in general good for consumers but in some cases low prices may be anti-competitive. The problem is to identify those circumstances and determine whether they are intended to force out competition or simply based on efficient operations. The mechanism by which a firm engages in predatory pricing, lowering prices, is the same mechanism used by a firm to stimulate competition. Since cutting price in order to increase business often is the essence of competition, mistaken interferences are costly, because they chill the very conduct the antitrust laws are designed to protect. The basic fact is that competition causes harm; the problem is finding behaviour that reduces competition in general and not just eliminates competitors. Smaller firms have a clear incentive to allege predation by larger rivals in order to obtain protection against legal vigorous competition. Sound economic analysis and legal rules have to go hand in hand but as Courts have a huge backlog of cases the time for thorough economic analysis is limited. The structural test presents an opportunity to solve this problem. Analysts and researchers, who have advocated the use of structural tests, claim that by analyzing market conditions like market share, entry barriers and competitor behaviour, competition authorities could efficiently dismiss unfounded claims and avoid complex and time-consuming economic price-cost analysis. This thesis advances the structural test by adding emphasis on a more strategic level. This has been desired by a number of the above-mentioned scholars who see it as the “missing part of the puzzle”. Researchers like Boudreaux dispute the effectiveness of structural tests claiming that it will lead to more companies being convicted of predatory pricing despite being engaged in any illicit activity. This thesis attempts to show that structural tests are not applied in order to secure more convictions but to give a more complete picture of the phenomenon of predatory pricing so that the chance of catching the right companies increase.

An assessment of costs is difficult. In principle, the relevant costs should be the anticipated marginal costs of the predator throughout the period of predation. Given the difficulty of determining marginal costs in practice, average variable costs are often used as a proxy. Even average variable cost, however, may be difficult to ascertain in practice. In U.S. judicial decisions, the determination of costs has been described as more difficult than the market power analysis. While simple to claim that market power is needed to make predatory strategies credible, the assessment of market power is inherently problematic. There are complex issues associated with determining the relevant product and geographic market as well as identifying categories of barriers to entry like sunk costs and economies of scale. How precisely they should be measured and evaluated is subject of debate. Evidence of subjective intent to predate is both hard to come by and often ambiguous. Though some have suggested it is the only way to distinguish predation from competition, its reliability is questionable and so, as an independent basis for imposing liability, it is often deficient. In some cases of true predation, it will not be

26 Joined cases C-395/96 P and C-396/96 P Compagnie Belge Transports and others v Commission, Opinion of AG Fenelly ECR, 2000 I-1411
obtainable. In cases where there is no prospect of recoupment, intentional predation will not have an adverse effect on consumers. Indeed, consumers will benefit from low prices during the unsuccessful predatory campaign. The only risk is that an effective competitor in the market will be eliminated.²⁸

In contrast to the outlook of the US Supreme Court the EU courts have taken a tougher stance against predatory pricing with several convictions to back it up. This can be explained by a somewhat different definition of predatory pricing, mainly that recoupment is not a necessary requisite for predatory pricing to exist. The underlying reason for the different legislative approaches can be traced to the difference in the objectives of competition law. The EC treaty envisioned other goals than merely promoting competition as is the norm in the US, consumer protection, the protection of small and medium sized companies and the environment are examples of additional objectives. This difference has potential implications for firms operating in the two markets, what business strategies can they use without violating antitrust legislation? The Microsoft case illustrates how this difference made the outcomes of the antitrust cases in the US and Europe diverge, in the US, Microsoft was absolved in the end but in Europe the Commission has found their behaviour to be abusive, among other issues was the occurrence of predatory pricing conduct. Microsoft in some cases even paid users to use their product instead of rival products, proving below cost in this case seems rather easy.

Key issues raised and analyzed: This thesis intends to answer the following questions in varying degree of detail: the overriding questions are intended to follow the reader through the course of the whole thesis and function as a background to the discussions. Given the vastly differing views between scholars, researchers, analysts and practitioners in addition to the different approaches taken by US and EU courts the answers depend on what perspective is used or what people are interviewed. Therefore the intent is not to give definite answers to these overriding questions but make the reader think and speculate given the presented material in the thesis, a short and general discussion is included in chapter six. The sub-questions are discussed and answered in the subsequent chapters with short summary in chapter six. Some questions are emphasized more than others resulting in answers with varying degrees of analysis.

Overriding questions:

- Is predatory pricing a rare or common occurrence, is it necessary to legislate?
- Is there a trade-off between efficiency and the protection of competition when applying business law?

Business law perspective:

- How does the legal environment regarding predatory pricing look today in the US and EU? Why is there a difference and what are the implications for antitrust analysis given the diverging views?
- What business strategies can be considered legal under the present legislative environment in the US and EU? Does it go beyond competition on the merits? What strategy concepts are essential for the analysis?

²⁸ Joined cases C-395/96 P and C-396/96 P Compagnie Belge Transports and others v Commission, Opinion of AG Fenelly ECR, 2000 I-1411
How is cross-subsidization seen from a legal perspective?

Business strategy perspective:

- Why is business strategy needed in predatory pricing analysis, what are the benefits of a structural test? What is the connection to economics and business law? How will a better analysis model be structured?
- What is the connection between cross-subsidization and predatory conduct?

Economic perspective:

- What economic concepts are necessary to include in predatory pricing analysis, connected to the business strategy analysis?
- What different cost measures are used and are to be used in the future?
- Which assessment theories are used today and what are the implications for predatory pricing analysis?

1.3 Purpose

The intent and purpose is to give a wide overview of the phenomenon of predatory pricing from a three sided approach using economics, business law and business strategy. The underlying questions in the thesis detail if predatory pricing is rare or common and if there is a trade-off between efficiency and competition when applying business law. These questions and the above sub-questions will be addressed. The use of economics and business strategy will be integrated as they often describe the same concept from different viewpoints. By conducting a strategic analysis the overall picture of the industry environment and the characteristics of the firm will be clearer, giving a better understanding of how the firm behaves and why. The proposed strategic analysis incorporates the elements suggested by the scholars who introduced the structural test approach and then furthers the analysis by use of additional strategic concepts. This kind of test can be useful for both acquittal and conviction of predatory pricing conduct given the legal parameters in existence. The business strategy section will entail concepts like game theory, industry analysis, resource & capabilities, competitive advantage, strategic pricing and corporate strategy. The use of cross-subsidization as a business strategy is also addressed as it has become the subject of similar discussion as predatory pricing, it can be seen as a form of predatory conduct used to finance a low price strategy. There are difficulties in proving if it is intended to reduce competition or just a strategic business move intended to break into new markets or offer consumers a wider array of product or services. The use of cross-subsidization analysis is also necessary because it can widen the scope of the behaviour analysis from the relevant market and show firm conduct in related markets, which is useful for future reference. These are concepts that can facilitate the understanding of firm behaviour from an industry specific viewpoint and serve as precursor to potential price cost analysis. The complexity of economic analysis and application of business law can therefore be saved for only the most rampant cases of predatory pricing. A comparative analysis between the US and EU legal and economic perspective will be included to showcase the different definitions of predatory pricing and what implications this has for antitrust analysis. The reason for why a US perspective was chosen as a comparison to the EU lies in the fact that most of the predatory pricing analysis and case law originate from the US,
which has dealt with predatory pricing for over 100 years. This plentiful experience has influenced other legal systems, even the EU but lately differences have begun to present themselves.

1.4 Target Audience

The primary target audiences for this thesis are students and faculty members at Lund University. It can however also be read by analysts, researchers and people involved in predatory pricing analysis as well as students at other universities. Given the theoretical backdrop it requires some prior knowledge concerning business, economics, business law and academic research methods. Technical jargon has been kept to a minimum for general readers and explanations of necessary abbreviations are included in the text as footnotes.

1.5 Delimitations

Given the wide area that predatory pricing encompasses it is necessary to set delimitations. The premise of the thesis is to give a wide overview of the phenomenon entailing economics, business law and business strategy. During the course of the research process, some areas, while interesting, had to be excluded because of its peripheral value to the discussion or because its inclusion would mean that the thesis would grow too large. To limit the reduction in value of this exclusion, minor discussions on the subjects were included. The first area delimitation that was necessary was the level of detail in the economic analysis. This thesis has kept the economic analysis at a level specifically oriented to the general practitioner’s level. In the business strategy arena, strategies were chosen on the basis of suggested gaps in the literature review and models that had a tie to relevant economic models and business law concepts. Furthermore a delimitation was set on the basis of what type of legislative acts and cases to analyze, for the thesis to remain general and useful to the masses the focus was put on federal laws in the US, state and local law was excluded for the same reason as why national Member State legislation was excluded in EC legislation, the intent is to provide a overview for companies operating on a wide scale, often the companies that find themselves in dominating positions.

The area called non-price predation was minimized as it entails sublevels that all warrant a wider discussion but they are not suited to the economic analysis used in predatory pricing cases. The unique and interesting feature of predatory pricing analysis is that it balances between positive and negative outcomes for multiple stakeholders, there are benefits to the consumer in the form of lower prices but can also be harmful in the way that choice can be reduced. Other forms of predation like predatory promotion or financial predation often only result in positive outcomes for the firm and not other stakeholders like consumers. The consumer welfare angle will not be addressed in detail, as it would require detailed economic analysis, which lies outside the scope of this thesis.

In the business law section important delimitations include the exclusion of selective price cutting from a more detailed analysis in the thesis. The reason for this exclusion is twofold; it raises the specter of discrimination, which is a complicated issue under business law and warrants a thesis in itself. The other reason is because of the difficulty in assessing why a firm chooses to set prices at different levels, the intent dimension is very hard to prove. Predation and discrimination are
independent concepts and can occur without the other being applied and can therefore be ruled separately by the courts.

In the area of cross-subsidization the occurrence of State aid is still a common occurrence but this avenue has been left untouched as this thesis focuses on private enterprise and its behaviour, the State aid dimension would add a tremendous amount of case law analysis that would cloud the issue from the private sector viewpoint.

1.6 Structure and disposition

After the introduction where the background, problem discussion, purpose target audience and delimitations are outlined, a chapter devoted to the research methodology will follow where the reader will learn how the information presented in the thesis was collected and analyzed. This chapter influences the results and layout of subsequent chapters. The third chapter presents the theories used in the thesis from an economic, business law and business strategy perspective. The theoretical framework has an impact on the following chapters. Chapter four details the empirical findings, i.e. the legislative situation. In chapter five an analysis will provide the reader with suggestions for how a better analysis of predatory pricing can be structured given the theories and legal parameters from chapter three and chapter four. Chapter six presents emerging insights, general conclusions and suggestions for future research. It takes into account the discussions in previous chapters to give a wide picture of the findings and answers the key issues and questions raised in the introductory chapter. The thesis ends with the bibliography and appendix.

Figure 1.6: Intended flow and structure of thesis
2 Methodology

This chapter serves as a guideline for the reader in order to explain how the author selected and handled the information required for the thesis and its completion. It will present the methodological approaches taken, the advantages and disadvantages with the approach and hence give the reader an explanation to how it influenced the result and ultimately the contribution of the thesis. The author hopes this will give the reader the possibility to form an opinion on whether the content and results of the thesis are relevant to the stated purpose.

2.1 Introduction

The reader will in this chapter learn about the author’s background and frame of reference in order to better understand how and why the thesis came about. A discussion on the chosen methodological approach when collecting data starts of the chapter followed by a description of the theoretical framework. The theory is a crucial part of the thesis and understanding why and how the chosen theories are important to the analysis will be central for the reader and his ability to understand the text and to develop personal insights. Additionally a section on the information collected will describe how the data was organized and analyzed and its reliability and value will be analyzed under the headline “criticism of sources”. To conclude the chapter the reader will learn how the analysis was conducted.

2.2 Empirical framework

To confer a comprehensive and up to date view of the problem at hand the thesis includes reports on the latest developments and findings by scholars, a historical outline and a case analysis of the most relevant cases in the field of predatory pricing in the EU and the US, current primary legislation will also be presented to clarify the view. The intent is to analyze the present situation from three different perspectives; business law, economics and business. To give the thesis the broadest application possible no field study has been conducted as focusing on a particular actor could have a narrowing effect on the thesis. The particulars of predatory pricing in certain industries and periods of the life cycle have been included to highlight the difference that exist and also give the thesis more specific use for future reference. In order to present an oversight of the issues at hand, statements from case handlers, researchers and business analysts have been used. Statements used were found in the press, the Internet and from official homepages and reports released by interested parties as well as from email interviews.

Given the nature and purpose of the thesis subject a traditional research perspective was selected as the modus operandi for the methodology. Unlike the qualitative perspective, the traditional research method is intended to prove or support earlier research, evaluating an already known fact from an objective point of view, in this case the fact that predatory pricing is a contested concept

29 This chapter borrows structural elements from: Lindberg, R “Internet and the digitalization of products: A potent mix or recipe for disaster? A case study of the music industry” (2003), Master thesis, Lund University, School of Economics.
under a legal and economic perspective, especially if a comparative analysis is made between the US and EU. Current case law, hypotheses and theories are tested and based on past theoretical findings and actual reality, adding a new perspective lacking from previous research; the business perspective. Had the qualitative perspective, which is more individual, subjective and social in its structure, been chosen for this thesis the interpretation of the empirical findings would have been based on the author’s and interviewed peoples’ personal thoughts about the concept of predatory pricing. This would have been the chosen model if the thesis had been a field study concentrating on one particular firm or industry. This thesis is intended to give a coherent and wide overview of the above-mentioned concept and provide the reader with a theoretical backdrop to better understand the reality in which companies make decisions that may be considered predatory by the authorities and consequently the courts. Traditional research is often explorative by nature but this thesis is more descriptive, borrowing traits from the growing field of research synthesis where the stated aim is to find generalizations, cause and effect connections, develop theories and seek practical applications.\(^{30}\) The following points illustrate why the research synthesis perspective was used:

- The area of study lacks a coherent oversight using the three chosen perspectives as a backdrop.
- The amount of data and research is plentiful and is rapidly increasing.
- There are contradictory statements and evidence circulating.
- There is a lack of theoretical (business) support in the general debate and legal cases.
- To add to the debate and give a more reality based view in respect to how companies make strategic decisions regarding predatory pricing and cross-subsidization.

The objective of the research synthesis is not to repeat past research but to analyze its implications and further the knowledge base. The contribution of the thesis is to introduce a new theoretical perspective in order to offer a more practical solution from a legal perspective. The purpose of the research synthesis in this thesis is to be integrative so that the three perspectives can be used as a platform for joint analysis and also to show areas where problems exist, for example the difference in legal application in the US and EU. To understand the differences the thesis will include a review on past research results and its practical implications. Because of the enormous amount of literature and cases in existence the author has chosen to focus on only the most seminal work been done and the most relevant cases. By conducting a rigorous literature review the most quoted and referred to research and cases were chosen and then cross-checked with chosen interviewees to ensure relevance.

### 2.2.1 Approach

The relationship between theory and empirical findings is defined by the choice of research approach.\(^{31}\) The thesis has used a deductive approach in the sense that discussions and analysis

---

are based on theoretical knowledge from books, articles and statements from experts in the field. The thesis examines theory in order to analyze practice, illuminating the relationship and interplay between the two.

The method chosen for this thesis is qualitative in its nature, as it doesn’t rely on numbers and other quantitative measures but instead verbal wordings, written or spoken. It is necessary to distinguish between qualitative method and qualitative perspective, as they are not synonymous.32 This method was chosen because it represented the best approach to answer the questions and problems posed in the introductory chapter. The thesis is a case study although it hasn’t got a qualitative perspective, which is often synonymous with case studies.33 The contextual approach made it hard to define what a case really is and where to draw the line. The process started out with the definition of the problem and the choosing of the analysis subject, which in this thesis is the phenomenon of predatory pricing and cross-subsidization. A case can be a firm, an individual, a group, an event or a phenomenon. As the predatory pricing phenomenon is a wide area of study, the field was narrowed to the US and EU. A case study does not limit itself to one case; several cases can be studied within the confines of the study, which in this thesis represents the comparative analysis between the legal views in the transatlantic area. The following quote by Yin, that defines a case study as a strategy designed to investigate a phenomenon in its actual environment, helped confirm that it was a case study.34

“A case study investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.”

The thesis is focused on the particular problems facing the courts when dealing with predatory pricing cases and cross-subsidization, specifically the lack of business perspective applied when deciding if the chosen strategy is predatory or just a legitimate business strategy originating from the particular characteristics of its situation.

2.2.2 Work process
The phases of the investigation, collecting and analysis process I have gone through can be described in the following manner:

1. Problem formulation.
2. Investigation plan is constructed.
3. Data collection method; the advantages/disadvantages of sources are weighed against each other to decide which will suit the current investigation.
4. Data collection.
5. Handling, evaluating and organizing of data.
6. Analysis; the data is interpreted and categorized.
7. Presentation of results in written format.

33 Backman, J (1998) Rapporter och uppsatser, Studentlitteratur, Lund
2.3 Theoretical framework

As predatory pricing is a hotly debated field of study with some researchers even contesting its existence, understanding the underlying theory is imperative for the reader in order to relate to the discussions found in the analysis. The theoretical chapter will cover traditional business theories in the field of economics and business strategy so that the empirical findings, i.e. the case law and legislation are better understood and also gives the reader the opportunity to form opinions of where the courts decisions are lacking and what implications they have. Theory will also include competition law characteristics from an EC perspective, which serves as the bridge to the practical application of the law. The working methods of the ECJ and CFI will be discussed briefly to show how this influences their decisions. The US perspective will come in the form of case presentations and their implications; the inner workings of the courts are not highlighted as it lies outside the scope of this thesis.

In the field of economics pivotal theories and concepts linked to predatory pricing and cross-subsidization were chosen, these include the market conditions present in different market structures like monopoly, oligopoly and perfect competition. In order to understand the pricing policies used by companies acting in these market conditions and in different industries, theories of cost analysis will be included. This entails variable and fixed costs, average and total costs, marginal costs, common costs and other relevant cost measures. As mentioned in the introductory chapter, predatory pricing cases have benefited from economic analysis from an early stage, the problem is that economic theory is lacking in realism, they work better on a grander scale where assumptions can be made without distorting the results. In predatory pricing the issues are more individualized towards companies or industries and cannot be generalized too much if the decision taken by the courts shall be specific to the situation. This is where business strategy theories can be of help, they are more tailored to fit specific companies or industries and the environment they operate in and can therefore give the courts the final part of the puzzle, seeing the allegation of predation from a strategic perspective which under careful analysis can reveal the practice to be understandable and even industry practice in the current environment, it can also help in distinguishing the reverse situation. The strategy perspective is a continuation of the structural test theory discussed in the introductory chapter and will ensure a first stage in predatory pricing analysis where the goal is to ensure that only the most relevant cases are presented for further tests in the economic and legal arena. The theoretical framework will include industry analysis, industry life cycle analysis, business strategy concepts like Five Forces, Key Success Factors, relevant market, competitor analysis (resources and capabilities) and segmentation analysis. Further, entry strategies, global strategies, game theory, competitive advantage, value chain (vertical integration) and portfolio strategy will be discussed, this in order to better understand the link between predatory pricing and cross-subsidization.

The choice of theory was consciously directed towards finding new and updated models that took into consideration the impact of the realities of the new economic reality under which companies operate.
2.4 Data collection

The data collected for this thesis is secondary in its nature, a common trait of the research syntheses process. Secondary data functions as further education as well as basis for analysis. The intent was to give a strategic perspective to the topic of study and to be as objective as possible. Conducting a specific study of one company with a more qualitative perspective was considered but in the end discarded, as it felt more relevant to provide a wide analysis with broad range of application. Furthermore, in order to keep the strategic perspective on a general level studying the specific resources and capabilities of an individual company would make it harder to conduct a transatlantic comparative legal analysis. This meant conducting email interviews with people near the courts and researchers and analysts not tied to specific companies.

2.4.1 Primary data

Emails were sent out to the case handlers at the Commission, researchers and scholars and business analysts with questions that were supposed to fill in the blanks and provide a more practical perspective regarding possible strategies and developments in the field. Their response constitutes the primary data in this thesis. The data collection process entailed getting hold of statements from the above in order to get a clearer picture of how the present situation has come to be and how this would affect future strategies given the empirical findings. In order for the author to avoid developing a predisposition towards a particular viewpoint the interviews were targeted both towards the legal community, i.e. the Commission and legal analysts but also towards the business community represented by business analysts and researchers. Both sides of the story have to be considered. To get a better sense of what the relevant actors think, statements in the press and on web pages were studied. The next step was searching for news articles and research papers about the same topic to conduct an analysis and comparison. In order to find out if my topic of discussion and eventual conclusions would have any practical interest for the intended readers and to validate my findings and work process I have directed questions to that effect in my interviews with analysts and researchers specifically oriented in this field. Emails with the same set of questions were sent to 10 specifically chosen subjects based on the criteria above and the availability of contact addresses, including DG Competition at the European Commission, the United States Mission to the European Union, the Canadian Competition Bureau, the OECD, competition analyst organizations like Compecon, Cato and Competition Enterprise Institute, researchers like Aaron Edlin, Bill Anderson, Kenneth Fjell and Dermot Nolan. Answers and suggestions for further reading were received from 6 out of the 10. No direct quotes are used in the thesis; the answers are fused with the text as part of the discussion with referencing in appropriate places.

2.4.2 Secondary data

The bulk of the source material used for this thesis is written, secondary data; this includes books, articles, Internet homepages, case law, databases and information gathered from news reports. This thesis is a mixture between a traditional research paper and a research synthesis process, gathering data for eventual analysis is therefore the most important task. Given the wealth of information, the problem was deciding what to use and what to disregard. No specific time frame was used to separate what literature to use as the historical development is important to study in order to understand current developments and case law. The method of choosing literature and
cases to analyze was based on the impact that they made in the field of study and consequently how often they were quoted in the literature review process.

Databases were the primary tool for finding relevant literature and articles, in conjunction with case study done at the law faculty in Lund University. Searching through bibliographies of essays and reports also functioned as a process of validation for the literature selection. Most bibliographies contained the same base reference works and gave an indication of where to look to get an accepted and proven reference, sort of a triangulation method. The work process described in chapter 2.2.2 is an accurate account of how the data was organized and handled. Before writing anything down, the author organized the information into different topics chosen beforehand to correspond with the theoretical headings. To collect data for empirical and theoretical implementation, the database ELIN at Lund University was used in conjunction with ERIC, ABI/Inform and Kluwerlaw. These databases have a wide variety of economic, legal and business strategy oriented journals at their disposal. The author used search engines like yahoo.com and google.com to further the search and find material perhaps not included in traditional research databases. Search terms used to find the desired data included: “predatory pricing”, “cross-subsidization”, “predatory pricing in the EU and US” and “predatory pricing as a business strategy”.

2.5 Criticism of sources

There are a number of factors regarding both primary and secondary data that have an influence on this thesis and its conclusions. Here follows a discussion on the influencing factors so that the reader can decide if the data used can be considered useful for the stated purpose of the thesis.

Primary data consisting of interviews run the risk of having leading questions coloured by the constructor and his frame of reference. Subjectivity can never be eliminated; there is a tendency that the interviewee leaves out information not suited for outsiders. Traces of subjectivity can be useful and interesting as it can explain certain behavior that outsiders find puzzling. In addition it can be useful to study past statements and compare them to the most recent to see the change in attitude towards a particular issue. To get a well-balanced view of the story, statements from all involved parties have to be considered and evaluated. The limited primary data in the thesis (in the form of email interviews) has its drawbacks and consequences, the level of detail normally obtained in personal interviews is reduced, and there is a risk of misinterpretation both from the interviewer and the person analyzing the answers. Furthermore the contribution to the general debate can be questioned if too much data is merely a repeat of earlier work, the challenge lies in conducting an analysis that takes these drawbacks into consideration. To combat the aforementioned problems interviews from different sides of the problem were conducted and compared with earlier statements so that the risk of misinterpretation would be reduced.

Secondary data poses its own particular problems, even more so in this thesis that relies on reports on a phenomenon that is neither settled nor clear-cut. All material used faces the same problem, it is tilted towards a particular viewpoint which the author had to be aware of when quoting in the thesis. The contribution of the thesis is to give a strategic perspective on the

current controversy in order to show how future analysis of predatory pricing claims can be conducted with a more balanced and accurate view; the practical applications are however not guaranteed models for success. Four criteria in the data selection process were applied; answers and statements had to be valid, relevant, reliable and truthful. Reports, essays and other written material have been evaluated in terms of consistency of arguments, assumptions and stated implications. Case law has been studied in a detailed manner, statements from key participants, implications for the future and application of relevant law is discussed. A concerted effort has been made to resist the temptation of only using material that would back up personal thoughts or conclusions. Using search engines on the Internet like presents a vast amount of data, which has to be sorted through a filtering process to find only the most “official” information possible. The only data used from these searches were from online versions of newspapers and additional research papers and reports to complement the ones gathered from the academic databases. Objectivity can of course never be expected when using data from industry analyses, the information used from these sources have been limited to studying current strategies and finding out what the official line is towards the problems discussed in the thesis. Newspapers and online news sources are expected to convey a more objective and unbiased view. This is however not a given. The process of publishing an article in the paper is dependent on individuals who might have a dormant predisposition one way or the other, there is also the risk that the journalist has misinterpreted information and as a consequence written a report lacking in accuracy. Research articles from databases, which are heavily used in this thesis, have gone through a rigorous academic feedback process; there are certain conditions that have to be met in order for the article to be published. None the same the author’s personal thoughts often shine through and when using these articles as reference for theory and empirical findings the information is already analyzed. Furthermore, their work is based on sources, which the reader often can’t subject to the same standards as used for the own thesis or report.

2.6 Frame of reference

The author’s academic background in business administration, with a focus on strategy, marketing, business law and European Affairs presents has meant that the particular problems regarding predatory pricing is well understood from the different perspectives and is also the reason for why the topic was chosen. The very fact that predatory pricing is such a hotly debated issue made for an interesting topic with huge implications for the parties involved in the cases. The author’s background gives him an opportunity to further the debate and provide interested readers with a three sided approach that will give them a better understanding on recent developments, the prerequisites for continued development in the field and the implications of including the strategic perspective in the analysis. Because of extensive background reading, both before and after making the choice of thesis topic completely objective on a personal level is impossibility but the method chosen to conduct the thesis will help in achieving a relatively unbiased analysis.

2.7 Method of analysis

The analysis process while concentrated to chapter 5 can be found in both chapter 3 and 4 in a small scale to convey a clearer view to the reader, which will be of benefit in chapter 5. It is important to point out that chapter 4 is not strictly an empirical chapter; there are pre-analyzed sections that will be carried over into the analysis in chapter 5 and then put under the microscope with the help of the theoretical models from chapter 3. This comes in the form of analysis of the cases and the implications of their outcomes. The US perspective is presented in chapter 4 but the discussion on how the differences with EU can affect business strategies are left to chapter 5. The analysis is continued in chapter 6, conclusions, which also serves as a summary of the thesis and an opportunity to speculate on the future and the implications of the research and what new avenues can be explored. Data collection and data analysis can be hard to distinguish in cases where the collected data is pre-analyzed. To combat the problem the theoretical framework was systematically compared to the data so that the analysis in chapter 5 and 6 would differ from the analysis in chapter four which was mainly based on past research. It was an iterative process where the author moved between the analysis and the theory to develop a strategic perspective. The collected data was sorted into strategic subcategories in order to ease the comparative analysis. The analysis is divided into different situations where predatory pricing can occur.
3 Theory

In this chapter the reader will be introduced to the theories that are the backbone of the thesis. It will be vital to understand them in order to fully comprehend the discussions that follow in subsequent chapters. As this thesis focuses on predatory pricing and has a three-sided approach the reader will be acquainted with relevant theories in the field of economics and business strategy. Economic theories include general economic concepts, market structure dynamics and cost analysis and predatory pricing assessment theories. In order for the reader to get a proper understanding of predatory pricing as it is defined today the economic theories are presented first so the classical view comes before the new approach. Business strategy theories entail industry analysis models like Five Forces, Key Success Factors and segmentation analysis. Intra firm characteristics will be analyzed from a resource and capabilities viewpoint as well as from a competitive advantage perspective. Strategic pricing, industry life cycle theory and corporate strategy round off the theoretical framework. In the business law field the characteristics of competition will be discussed, as this is important to understand before reading the empirical chapter where the legislative environment is outlined.

3.1 Economics

Economics is called the science of choice since it explains the choices individuals and firms make and how those choices change over time depending on the situation. In short economic choices can be summarized in five big general questions about goods and services produced; what are they, how, when and where are they produced and who consumes them. In everyday situations the issue of scarcity is the fundamental economic problem because there exists limited resources (labour, land, capital and entrepreneurship) and unlimited wants. The challenge is to convert the limited resources into the best combination of resources. The big ideas of economics include choice, efficiency, market failure, trade-off and opportunity cost (the highest-valued alternative given up to acquire something else).

To understand the markets in which businesses operate a definition of demand and supply is needed. Demand is the relationship between a quantity of a good or service and its price as all other influences on buying plans remain constant. High price means lower quantity demanded, but demand also depends on prices of substitutes and complements, expected future prices, income, population and preferences. Market demand is the sum of all individual demands. Supply is the relationship between quantity supplied and the price when other influences on selling plans are constant. High price means higher level of quantity supplied. Supply depends on prices of resources used for production, prices of related goods, expected future prices, number of producers and technology. At a market equilibrium supply equals demand, prices above means a surplus resulting in a price drop and prices below the equilibrium means there is a shortage and results in a price increase. Price elasticity of demand measures responsiveness of the quantity demanded of a good to a change in its price. The magnitude of the elasticity depends on how easily a good serves as a substitute for another, proportion of income spent on the good and time.

38 ibid. p 62-63
lapsed since the price change. Cross-elasticity of demand measures the responsiveness of demand for one good to a change in price of another good that is a substitute (positive cross-elasticity of demand) or complement (negative cross-elasticity of demand). Elasticity of supply measures the responsiveness of the quantity supplied to a change in price. Supply elasticities are usually positive. An efficient market is characterised by efficient resource allocation, which happens when marginal benefit (benefit of consuming one additional unit, value to consumers) equals marginal cost (cost of producing one additional unit, opportunity cost for producers). Marginal benefit is measured by the maximum price consumers are willing to pay for a good and thereby determines demand. Marginal cost is measured by the minimum price a producer must be offered to increase production by one additional unit and thereby determines supply. The competitive market’s efficiency has been questioned because of the possibility of monopolies arising and restricting production, there is the free-rider problem, price ceilings and floors, external costs (a cost incurred by someone who hasn’t paid and received for a particular product or service, for example if a factory opens up, the surrounding homes and inhabitants may suffer in the form of lower market value for the houses and health issues) and benefits (a benefit experienced by someone who hasn’t paid or contributed to the product or service, for example if one neighbour renovates his house the other neighbours accrue benefits in the form of higher market value for their homes as the neighbourhood looks more attractive), taxes, subsidies and quotas. These factors create artificial levels of price and quantity which influences demand and supply. There is also a debate if the competitive market is fair, some scholars say the results are not fair requiring income transfers from the rich to the poor and others say the rules are not fair requiring referring to property rights.

Economics is an area of study characterised by diversity of opinion rather than uniformity. Models are based on assumptions about what is essential and what can be ignored and the implications of those assumptions. Even though they are checked against facts on the ground in most cases they don’t correspond to business reality. Different economists interpret models and empirical facts differently resulting in different policy recommendations on the same issues, for example in the field of predatory pricing. Models often leave open possibilities of alternative explanations (mainly because of the vast amount of data that has to be collected and analyzed), this suits the legal analysts very badly as they rely more on accurate and one dimensional facts that can’t be explained away by other “truths”. In the US there is another complication as the complex facts are presented to a lay-jury who are unable to analyze the strategic complexity of predatory pricing cases. Examining the economic situation of the market is essential for a successful analysis of a predatory pricing allegation.

3.1.1 Perfect competition
Perfect competition represents one extreme end of the market structure model, with monopoly at the other end. Most markets are in between these two extremes as the extremes rely on assumptions that often do not exist in a real market, for example the absence of entry barriers. Perfect competition occurs when there are many sellers and buyers of an identical product and

---

39 ibid. p 86-87  
40 ibid. p 107  
41 ibid. p 5-17  
when new firms can easily enter a market because entry barriers are low or non-existent, established firms therefore have no advantage over new ones. Both sellers and buyers are well informed about prices and act in a rational manner. Demand is large relative to efficient scale of production and the competitive firms can be described as price takers, i.e. they have no influence over the price level, market demand and supply determine the price. Therefore the firm produces short run output at a level where marginal revenue (price) equals marginal cost. If economic profit is made new competitors are induced to enter the market while a loss induces exit by existing firms. Profit is kept to a minimum level in the long run as new entrants increase supply, therefore production is kept at minimal cost. A permanent decrease in demand leads to smaller output and a reduced number of firms and an increase leads to the opposite. No economies of scale exist. Perfect competition assumes that resources are used efficiently at production at exactly the quantities desired by the consumers. Efficient allocation depends on the absence of monopoly (no collusion either) and external costs and benefits.43

3.1.2 Monopoly
Monopoly occurs when a firm that produces a good or service for which there are no close substitutes and can protect its market from new entrants by barriers to entry. Barriers can be legal (government regulations) or natural (here one firm can supply the entire market at a lower price than two or more firms can because they own the relevant resources). Monopoly is undesirable for different reasons, price charged by the monopolist is higher than marginal cost and there is no pressure to reduce the price in the long run since no other suppliers exist. A monopoly situation also facilitates price discrimination when there is no resale possibility, this is done to capture the consumer surplus and turn it into economic profit by charging every customer as much as they are willing to pay. If such a possibility exists the monopolist can charge a single price and maximizes profit by producing at an output level where marginal revenue equals marginal cost. The monopolists can charge the highest price consumers are willing to pay for the output. Compared to competitive market a monopoly charges a higher price and produces a smaller quantity, which creates an inefficiency (deadweight loss, defined as total loss resulting from the smaller monopoly output, also a measure of loss of the allocative efficiency resulting from a restriction of output below the efficient level). Additional cost from the monopoly situation is tied to rent seeking (the attempt to capture consumer surplus, producer surplus or economic profit). From an economies of scale (an increase in production brings a decrease in average total cost of producing it) and scope (an increase in the range of goods produced brings a decrease in average total costs) perspective a monopoly can be justified (since they can produce at lower average cost than a larger number of firms can) and tolerated if governed by legislation to ensure protection of consumers. How to regulate the monopoly in an efficient manner is not clear with suggestion of average cost pricing seeming to be the lesser of evils at the moment. This number of industries where this is true is diminishing since deregulation of former state monopolies have brought a number of new competitors to the scene. The question of whether a monopoly is more conducive to innovate than not is hotly debated and the evidence is mixed, some argue that without the promise of sole rights like a patent there is no incentive to innovate and invest while others state that firms operating in monopolies become lazy and concentrate more on profits than innovation.44

43 ibid. p 217-235
44 ibid. p 241-257
3.1.3 Oligopoly

Oligopoly is a situation where a small number of firms compete with each other. Exactly how many firms that constitutes an oligopoly is not defined but the general consensus hovers around 3-4 (a duopoly only has two firms). The lack of definition means there are several models and theories in existence resulting in different rules on different markets. The debate between the Harvard approach and the Chicago approach is a prime example with the former arguing that high market shares imply collusionary behaviour. The Chicago school see high market share as a sign of efficiency and think legal intervention interferes with market dynamics. The dominating theory concerns the interdependence assumed to exist between the alleged oligopolists. Price and output decisions taken by each firm affect the other firms in the market in the sense that the have agreed to take parallel action in order to keep prices at a desired level. Each firm must take into account the effects of its own actions on the actions of other firms. This anti-competitive conduct has often been witnessed in petrol markets with the formation of cartels. A high level of symmetry between the firms suggests they have common interests, for example similar production methods and products, similar barriers to entry and legal environment. In some instances the firms may form a clandestine joint monopoly or what is known as collective dominance to control prices and keep out new entrants. Collusion can be tacit or active but the result from an economic standpoint is the same. If rivals match price cuts but not price increases the face a kinked demand curve and therefore only make price changes when a large cost change occurs. If there is a an agreement in place a price hike will be followed by rivals and maintain the status quo in terms of market share but the firms will reap higher profits because of the increase in price. If one firms dominates the market it can act as if in a monopoly and smaller firms take the price level as a given, they are price takers. As in the case of monopoly economies of scale and scope are factors that work in favour of this form of market structure in some cases. A theory often applied to oligopolistic situations is game theory, which tries to predict strategic behaviour (see business theory part for more on game theory).45

3.1.4 Monopolistic competition

Monopolistic competition occurs when a large number of firms compete with each other by making slightly different products. Firms mainly compete on quality, price and marketing. There is freedom of entry and exit in the industry and each firm possesses a small market share, which means there is little control over price. Economic profit can be made in the short run but this attracts more competitors resulting in zero economic profit in the long run. Production of output is at a level where marginal revenue equals marginal cost. Price equals average total cost but exceeds marginal cost resulting in excess capacity in the long run. To maintain economic profit innovation is high, advertising can be both positive (can increase quantities sold) and negative (increasing profit attracts competitors, which reduces demand for the firms product). If monopolistic competition is inefficient depends on how much value consumers place on product variety, the plethora of brands in the market place in product categories like food and magazines mean that consumers do appreciate the level of choice that exist when there is large number of firms offering similar products with minor differences, the brand name is an important aspect in the choice of product.46

45 ibid. p 269-284
46 ibid. p 263-269
Table 3.1.4: Comparison of market structures (Parkin, M, Powell, M & Matthews, K “Economics” (2003) Addison-Wesley, Fifth edition, p 283)

3.1.5 Cost measures

A firm’s costs can be divided in fixed (FC) and variable costs (VC). Fixed costs (similar to sunk cost which refers to costs which are unrecoverable) do not vary as production increases or decreases (i.e. the rent paid for a factory). Variable costs increase as production increases (i.e. raw materials, energy and labour). There can be difficulty in determining what costs are fixed and what are variable, for example advertising. These two measures together constitute total costs (TC). These costs are often expressed as averages per unit of output produced. Average fixed cost (AFC) declines as the production increases. For instance, if the fixed costs of one factory were 100 and 20 units were produced, its AFC would be 5 per unit. If 50 units were produced, AFC would drop to 2 per unit. In addition to these fixed costs, the production of each unit requires some cost, such as raw materials or energy, which are variable (AVC). In order to be profitable, a company has to recover both fixed and variable cost which implies that the price of each product should cover the average total cost, ATC (AVC + AFC) plus a reasonable profit. In some cases, it may be reasonable for a firm to charge prices below ATC (for example when there is excess capacity as often happens in cyclical markets where firms want to sell more even if additional units only make a small contribution towards overheads, to categorize this as predatory would hurt companies and consumers)47 but charging prices below AVC would almost never be rational behaviour unless the company’s strategy is focused on grabbing as much market share as possible with no profit goals. Another relevant cost measure is marginal cost (MC) which is the change in total cost resulting from increasing or decreasing the output by one unit (MC = ΔTC/ΔQ) when analyzing marginal cost fixed cost are to be ignored as they are the same at all levels of output. Incremental costs are those attributable to a product in the company’s product line. It is also necessary to consider the time frame of the cost and output calculations. In the short run the quantity of one input in production is fixed and the quantities of another can be varied. As output increases in the short run total fixed costs is constant and total variable cost and total cost

---

increase. AVC, ATC and MC decrease at small outputs and increase at large outputs. In the long run the quantities of all inputs can be varied. Long-run average cost traces the relationship between lowest ATC and output.\(^{48}\)

**Graph 3.1.5: Predatory pricing graph\(^ {49}\)**

### 3.1.5.1 Market Conditions

In order for predatory pricing to be a usable and successful strategy certain market conditions have to be met, these include the existence of a dominant firm or a group of firms working in unison and together having enough market share to control the market structure. Furthermore there have to be high entry and re-entry barriers. Only then can competition be harmed if the pricing policy is enacted. Analyzing the market conditions to see if predatory pricing is in action and if it harms competition can result in what is known as error costs\(^ {50}\), which can be of two kinds and both are detrimental to competition as a whole. The false positive error means labelling a competitive price cut with no illicit intent as predatory and the false negative error which means failure to identify a real predatory price cut.\(^ {51}\)

### 3.1.5.2 Barriers to entry and re-entry

If predatory pricing is to be a practical and profitable business strategy there needs to be certain levels of entry barriers to the market. If not, the victim of predation or other prospective rivals would without delay re-enter the market when the predator raises its prices resulting in driving prices back to a competitive level and denying the predator the chances of recouping its losses. Entry barriers are in force when a new market entrant faces costs that the established players don’t have to take into account (fixed cost like investing in infrastructure and a host of other

---


\(^{49}\) [www.clt.astate.edu/crbrown/predatory.htm](http://www.clt.astate.edu/crbrown/predatory.htm) accessed 12/05/04


\(^{51}\) Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University, p 13. This source has been referenced and used throughout the thesis as a backdrop and gave the author suggestions for concepts to include in this thesis. The author has then expanded on the existing theories and added new perspectives. For a complete list of sections, which have used the said source as a background, see Chapter 7.2 under Barthel, C.
factors like government regulation, patents, reputation and technological leads, the definition of an entry barrier depend on the situation and the underlying economic theory used by the court). The newcomer must incur such costs and the incumbent can under-price, turning the fixed cost investment into an entry barrier. Barriers to entry exist on both the demand and supply side. Re-entry barriers exist when a company that has left a market incurs significant costs when trying to reopen its business (for example costly marketing campaigns to re-establish reputation). If no re-entry barriers existed the firm that left the market because of predatory practices could enter the market again when prices are raised to monopoly levels and undermine the predators pricing policy. A history of predatory pricing strategies can be categorized as a barrier because of the signal effects (see relevant section in the business strategies segment).52

3.1.5.3 Financial requirement

A firm that engages in predatory conduct like pricing below cost for an extended period of time must have adequate financial reserves. These reserves can be obtained by having a larger market share, an efficient operation with competitive advantages over rivals, a company with multi-market presence have the possibility to siphon funds from profitable markets to markets where the company is trying to gain market share or defend itself against new rivals.53

3.1.5.4 Recoupment

While still contested the existence of predatory pricing and its logic has been more or less established by use of economic analysis and by introducing the concept of recoupment the rationality of the pricing policy is clearer. When selling below cost (the first phase of the predation strategy) the supposed predator must have reasonable expectations for recouping incurred losses and making additional gains for it to make sense from an economic perspective. Unless lost profits can be recouped, there is no threat to competition and consumers will benefit from the low prices.54 If business strategy perspectives were more closely applied in the analysis it would be clear that other more long-term goals are possible that makes no economic sense in the foreseeable future (see below for more on business strategies). Recoupment is a long-term objective of a predatory pricing system, which harms through the monopolistic prices charged. In order for the recoupment concept to be more useful it has to be defined more broadly than just being about retrieving initial monetary losses. Reputational benefits that occur in adjacent and non-related markets also have to be considered. Recoupment would then have more magnitude and predation becomes more plausible even if strict economic analysis fails to prove the allegation.55 In the US recoupment has a central role in predatory pricing cases, in both Matsushita56 and Brook Group v Brown and Williamson57 the Supreme Court ruled that there

56 Judgment Matsushita Electric Industrial Co. v Zenit Radio Corp. 475 U.S.574 (1986)
could be no predatory pricing without possibility of recoupment. The ECJ has gone in another
direction as was made clear in the Tetra Pak II\textsuperscript{58} case and the following quote:

“... it would not be appropriate in the circumstances of the present case to require in addition proof that Tetra Pak had a realistic chance of recouping its losses. It must be possible to penalize predatory pricing whenever there is a risk that competitors will be eliminated. “

Tetra Pak was found to be not dominant over a market and wouldn’t be able to recoup its losses but was found to be using predatory tactics. This mainly because they were dominant in neighboring markets and could use their financial strength to cross-subsidize their low prices in the studied market. It is up to the alleged firm to offer proof that it can’t recoup losses.\textsuperscript{59}

3.1.6 Assessment theories for predatory pricing

Ever since McGee scrutinized the Standard Oil case\textsuperscript{60} in 1958, using an economic perspective, different theories of identifying and assessing harmful predatory pricing have been brought forward by academic debate and advancing case law. Despite the criticism received McGee’s theory was the only workable theory until the late 1980’s. From this point on economic analysis categorized predation as a profitable and likely strategy for firms, courts have also called for a closer analysis by using more advanced economic analysis. In 1975 Areeda and Turner introduced their cost-based test to determine if pricing is predatory but it was criticized and a number of alternative tests emerged. A common trait of each approach is that they try to find a balance between fair competition and minimal interference in business practices. Dominance, cost measures and general economic conditions are common themes in all approaches except for those advocating no rules. This means that two criteria have to be satisfied, first competition on the merits allowing efficient firms to have a lower price than less efficient rivals and secondly, the dominant firms which can take advantage of their position to eliminate undesirable competitors must be deterred to engage in this kind of behaviour. The wide range of theories in existence can be explained by the difficulty in achieving a proper balance between the two criteria. In any contested case a company’s conduct requires careful examination and factual inquiry, guided by a sound legal rule and a thorough economic analysis. The standpoint of this thesis is that business strategy theory also has to be considered in order for the case analysis to be thorough. Disagreement in the academic debate and among antitrust authorities linger as to what a workable rule should entail. A common sticking point is the statement that predatory pricing occurs rather seldom and attempts to restrict competition does more harm than help. Furthermore the advancing detailed economic models used for analysis seem to overload the courts ability to work efficiently.\textsuperscript{61}

\textsuperscript{58} Tetra Pak International SA v Commission, case 333/94 [1996] ECR I-5951, paras. 41-45
\textsuperscript{59} Korah, V “An introductory guide to EC competition law and practice” (2000) Hart publishing, p 129
\textsuperscript{60} Standard Oil Company of New Jersey v US 221 U.S. 1, 47, 76 (1911)
3.1.6.1 No rule theory

Some economists spearheaded by the Chicago school of thought (Bork, McGee and Easterbrook), argue that predatory pricing is so rare that there is no need for a legal rule against it. From a legal perspective this is questionable as the rarity of an offence is not justifiable grounds of excluding it from legislative measures. The very existence of predatory pricing has been questioned; some economists see it as self-deterring making government intervention unneeded. Intervention and regulation would do more harm than good by risking false positive errors because courts have a difficult time distinguishing predatory from legal competitive behaviour. This school of thought is criticized for neglecting the long history of predatory pricing litigation, especially in the US where existence of the phenomenon seems hard to deny.

3.1.6.2 Price-cost tests

Condemning a company when the price level does not cover some measure of its costs has been suggested by a number of authors. The relationship of the company’s prices to its costs is the principal tool for identifying predatory pricing. There are vast differences in opinion among scholars when it comes to choosing which costs measure to use and what time frame to apply once it has been established that competition on the merits turns into illegal predatory pricing.

Areeda-Turner test

The most prominent test for analysing alleged predatory pricing was introduced by Harvard law professors Areeda and Turner in 1975, which has been widely adopted by US courts. It is considered to be the standard test for identifying predatory pricing, despite being applied with variations. Prices are recognized as predatory if they are below the short-run marginal costs of providing the product or service, unless higher than ATC. Because marginal costs are difficult to determine (for example producing one more unit of output in the airline industry, i.e. taking on another passenger on an empty seat can be done at negligible cost, in the software industry producing another copy of the software is done at next to zero cost because of the ease of replication) they are often substituted for AVC. A dominant firm should not be allowed to meet competition if it means that prices drop below AVC. The advantage of this test is its simplicity; by focusing solely on price-cost comparisons complex structural analysis (which is speculative according to Areeda and Turner) or subjective investigations about the intent of the alleged predator can be avoided. It creates an objective, uniform test for all forms of predatory

---

62 The discussion in 3.1.6.1 up to 3.1.6.5 are based upon a variety of sources which have served as suggestions for the author when choosing relevant assessment theories. The main sources are: Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University, p 20-23 and OECD publications, “Predatory Pricing”, p 19-27, Paris, 1989. Additionally the choices of assessment theories were backed up by answers received from the email interviews.

63 When a firm attempts predation, it incurs losses but ultimately gains no market power, as presumably the victim calls the bluff and weatheres the storm. After a while the predation ceases and the predator refrains from further attempts. Other firms refrain from predating as the chain of events is self-detering.


65 Areeda, P & Turner, D F “Predatory pricing and related practices under section 2 of the Sherman Act” (1975) Harvard Law Review nr 88, p 697, the test has been revised a number of times since then, for example in 1978, 1982 and 1986. The authors share the Chicago School’s view that predatory pricing is rare but should be dealt with since there is risk of reduction in competition.

66 Additional factors like intent and market structure were included by Circuit Courts in the US but the Supreme Court has kept the more narrow view of price below some measure of cost.
behaviour.67 This simplicity has been criticized for not incorporating broader economic and strategic aspects of predatory pricing. Relying only on cost data can produce cases where justice is not done because costs are difficult to analyze without understanding the environment the company operates in.68

**Long-term cost-based rules**

Short-run analysis has been dismissed as invalid and a number of scholars suggest that long-term costs are a better guideline since the predator, by pricing at short-run marginal costs, could eliminate a more efficient rival who lacks ability or will to sustain short term losses. The alleged predator could make use of cross-subsidization to support the pricing policy. Short-run cost based test does not consider long-term profit maximization and other fundamentals such as intent and possible defences of the pricing conduct.69 Another avenue of critique against the short-run approach is the fact that short-run marginal costs are not unquestionable as the optimal resource allocation practice. Considering various market imperfections, the difference between short-run costs and price does not always reflect the opportunity cost of “sacrificed” resources and that the company’s marginal cost is influenced by earlier investment decisions, which are not necessarily optimal.70

3.1.6.3 **Performance tests**

Another test that emphasizes long-term evaluation is the output expansion rule71, which scrutinizes the alleged predator’s performance after the exit of a rival from the relevant market, specifically on the output dimension. The theory suggest that a firm facing a potential new entrant produces at high output without violating the marginal cost or AVC rule and then at actual entry restricts output and raises price to maximize profits at that level of capacity. If the output remains constant or lower at the time of entry by a rival predatory pricing is ruled out. A rule prohibiting expansion of output for a period of 12 to 18 months can reduce the negative effects. The problem with this theory is that because of the complex set of rules based on AVC and other cost measures a true image of a firm’s performance is hard to establish. Additionally by restricting flexible output over a longer period of time reduces the firm’s capabilities to react and adjust to varying economic environment. Another approach suggest that any price cut made in response to entry is required to continue for a period of 5 years in order to limit the incentives for a predator since this would mean recoupment of losses becomes harder.72 Once again changes in cost and demand make it hard for authorities to obtain irrefutable proof that the conduct is predatory with intent to exclude rival entry. The irony is that if it can be proven the damage to competition is already done, i.e. the rival has exited the market. A continuation of the

---

70 Koller, R H “When is pricing predatory?” (1979) *The Antitrust bulletin*, nr 24, p 301
72 Baumol, W “Quasi performance of price reductions: a policy for prevention of predatory pricing” (1979) *Yale Law Review*, nr 89, p 1
performance test rules have been proposed by Edlin\textsuperscript{73} who claim that predatory pricing exists and should be legislated against even at above-cost levels because established rivals can set price and cost level high enough to make new entrants suffer from an artificially high cost level, depriving them of needed cash flow at the onset. This approach has been heavily criticized by other analysts and researchers like Elhauge\textsuperscript{74} who feel that this would seriously interfere with justifiable business practices and penalize efficient firms.

3.1.6.4 Rule of reason tests
By analyzing all evidence at hand instead of focusing on cost-price relations, the rule of reason tests establishes predatory conduct based on more than a single reference (as proposed in this thesis by adding the business strategy perspective). This wide-ranging inquiry includes factors surrounding the predators conduct, for example an in-depth economic and historic analysis coupled with focus on intent and consequences of the conduct, thereby avoiding strict short-run cost-based rules. Short-run cost test neglects to consider long-run allocation efficiency and can result in passive behaviour by the dominant firm and chronic excess capacity.\textsuperscript{75} Despite reducing the risk of false positive and false negative errors critique against this approach has focused on the additional flow of information that the courts and competition authorities would face resulting in legal uncertainty and confusing parameters for companies to follow.\textsuperscript{76} The trouble with intent is that most competitors would like their rivals to disappear but don’t advertise it, proof is very hard to come by.\textsuperscript{77} It has been said that while Areeda and Turner’s test is good law based on bad economics, the above recommendations by Scherer\textsuperscript{78} are bad law based upon good economics.\textsuperscript{79}

3.1.6.5 Structural tests
To incorporate aspects of the rules described above, a structural analysis of the relevant market can be used as a first filter to limit investigation to markets where favourable conditions for a successful predatory campaign exist in order to minimize the costs of enforcement errors. After the initial investigation a price-cost and intent analysis can be initiated. This two-tier approach was first proposed by Joskow and Klevorick and serves as the prototype for structural tests.\textsuperscript{80} The first step is to assess the market share of the alleged predator in order to determine its monopoly power, followed by an analysis of entry barriers to the relevant market and the dynamics of competitors and entrants. If predation if likely to occur, the second step consisting of a number of price-cost tests like the Areeda-Turner test is initiated. Prices below AVC would be considered predatory unless justified due to excess capacity, prices between AVC and ATC would be considered predatory unless the industry is declining or that the scale of new entry depressed prices. Prices above ATC would be considered legal unless a price cut in response to entry was

\textsuperscript{73} Edlin, A S “Stopping above-cost predatory pricing”, (2001), Yale Law Journal, accessed from: http://emlab.berkeley.edu/users/webfac/edlin/e121_sp03/stopcost.pdf 15/05/04
\textsuperscript{74} Elhauge, E “Why above cost price cuts to drive out entrants are not predatory – and the implications for defining costs and market power” (2003) Yale Law Journal 112:4 p 681
\textsuperscript{75} Scherer, F M “Predatory pricing and the Sherman Act: A comment” (1976) Harvard Law Review, nr 89, p 869
\textsuperscript{76} Martinez, L M “Predatory pricing literature under European competition law: The Akzo case” (1993) Legal issues of European Integration, vol 2, p 114
\textsuperscript{77} Korah, V “An introductory guide to EC competition law and practice” (2000) Hart publishing, p 125
\textsuperscript{78} Scherer, F M “Predatory pricing and the Sherman Act: A comment” (1976) Harvard Law Review, nr 89, p 869
\textsuperscript{79} Koller, R H “When is pricing predatory?” (1979) The Antitrust bulletin, nr 24, p 286
\textsuperscript{80} Joskow, P & Klevorick, A “A framework for analyzing predatory pricing policy” (1979) Yale Law Journal, nr 89, p 213
reversed within two years without a cost- or demand-based reason. By analyzing market conditions competition authorities could efficiently dismiss unfounded claims and avoid complex and time consuming price-cost analysis (the aim of this thesis is to advance the structural test by adding more emphasis on a strategic level). The US Supreme Court established a two-tier approach, the prospect of recoupment is the primary test for determining predatory pricing, leaving the Areeda-Turner price-cost test in an ancillary role. The ECJ also uses a two-tier approach as established in the AKZO decision, focusing on the cost and the strategy of the alleged predator. The ECJ condemned prices below AVC as abusive and prices between ATC and AVC as abusive when determined as part of a plan to eliminate a competitor.

3.1.7 Non-price predation

While not a new concept, non-price predation is receiving increasing attention and therefore merits mention in this thesis although not being the focus as predatory pricing. Predatory business behaviour includes excessive product differentiation, predatory advertising and investment and predatory product innovation. The economics of non-price predation are different from price predation. In contrast with predatory pricing, which lowers rivals incomes the aim is to raise their costs. The strategy is as follows; if cost increases can be imposed on rivals, the predatory firm can profit immediately even if the rivals remain in business, this because its margins will increase disproportionately in light of the rising general price level. Another scenario is if prices remain constant, the predator gains market share as rivals restrict output. These scenarios make it clear that the recoupment criterion is not applied in this type of predatory conduct since the pay-offs are more immediate. The theories of reputation-based predatory pricing are largely built on pay-offs in other markets, in non-price predation there is no prior condition that a predator be a multi-market or multi-product firm in order to find it worthwhile to raise its rivals’ costs. All companies, even local ones, would benefit if rivals’ costs go up disproportionally to their own. Finally, the dominance criterion is also sidestepped as any costs a company (big or small) incurs in predatory behaviour can be spread out over a larger output.

A similarity between predatory pricing and the other forms of predation is defining what behaviour is predatory and what is sound competitive behaviour. One possible suggestion is analyzing profitability of the measure, if profitability is dependent on market exit by a rival the move can be seen as predatory, the intent was to eliminate a rival. If there are high entry and expansion barriers in the output market the use of predation is more likely. Predation can occur through the abuse of government procedures like sham litigation and the misuse of licensing and regulatory authorities. Domestic firms may for example use sham proceedings under import relief laws, e.g. an unwarranted claim of dumping, to engage in non-price predation against a foreign rival, which in extreme cases can lead to collusive industry to industry settlements (cartels). Exclusionary agreements that can reduce the number of dealers has also been suggested as a move to raising rival’s costs but this has stirred a debate as vertical integration is seen as a strict efficiency strategy.

Another form of non-price predation is financial market predation, which is closely tied to the financial requirements criterion. This strategy entails the predator using its financial position to encourage investors to terminate their investments in a rival company capitalising on the imperfections on the capital markets where the rival will protect itself from creditors and neglect investors’ needs.\textsuperscript{85}

### 3.2 Business strategy

#### 3.2.1 Game theory and signalling effects

The introduction of game-theory\textsuperscript{86} has contributed in the form of presenting a challenge to the static framework of perfect information which scholars dismissing the rationality of predatory pricing relies on, instead it incorporates scenarios of imperfect and asymmetric information where predatory pricing can be profitable and thus rational.\textsuperscript{87} Game theory also elevates the industry analysis to a level more sophisticated than Porter’s Five Forces, it offers insights into a company’s choice between competition and cooperation (in today’s business climate a rival can also be partner in a complementary area), the role of threats and commitments, sequencing of decisions and the specific payoffs of each. Decisions made by one player are dependent on actual and anticipated actions by other players. Game theory can predict the outcome of competitive situations and offer guidance to the choosing the most optimal solution. Game theory became an established theory in the 1980’s but practical application in the field of strategic management was limited until the 1990’s. The theory has been applied in varying situations like the Cuban missile crises, Reagan’s tax cut in 1981, subsidies for Airbus industries, production cuts for OPEC and airwaves auction in Europe and the US. Because it is grounded in economics and mathematics the level of complexity is high despite the relatively few variables and assumptions used, in reality where multiple variables are common the theory can become too imprecise and offer a variety of alternatives. The fact that is has proven to be most successful in analyzing past behaviour and not predicting future outcomes make some scholars wary of its use. It is also more of use in situations where competitors are evenly matched, for example in an oligopoly. It can however be a useful tool in understanding competitive business situations better, not giving specific answers.

An example of its use can be explained by the Prisoner’s dilemma (keeping silent or telling on accomplices in order to avoid stiff sentence) put into a business context like a price war and the consequences for market share. The key to solving the problem is changing the game from a single occurrence to a repeated game, in the case of price competition in an oligopoly situation (see economics segment for definition) markets tend to converge toward patterns of price leadership where price competition is avoided. The question that immediately arises, given this scenario, can predatory pricing exist in an oligopoly? To get evidence of collusion the antitrust

\textsuperscript{85} Bolton, P, Brodley, J & Riordan, M “Predatory pricing: Strategic theory and legal policy”, (1999) Center for Economic research, nr 9982, p 54

\textsuperscript{86} The reason why game theory is discussed before the industry analysis is because of its existing connection to predatory pricing analysis, its implications are not new and is therefore being discussed first for chronological reasons as the following business strategy literature has not been discussed in the same manner.

\textsuperscript{87} In the article “The chain store paradox” from 1978 Richard Selten explain the benefits of game theory. He uses the theory to demonstrate how rational players can expose threats of predation in multiple markets. The work has since been rebuked and said to only hold in perfect information scenarios. See OECD publications, “Predatory Pricing”, p 11, Paris, 1989
bodies are trying to change the payoffs in the game by letting the whistle blowers get lighter fines or avoiding them altogether or by enforcing draconian measures if companies are caught in an abusive behaviour (deterrence). Deterrence must be credible, for example; if an incumbent company threatens new entrants with aggressive price cuts, the entrant can rationalize this behaviour as a smoke screen because once it has entered the market it is often not in the incumbent’s best interest to engage in a costly price war. To judge if the deterrence measure is credible the entrant has to look at past behaviour (a reputation of aggressive defense is a powerful signal), commitments like statements that the incumbent will match any offer made by the new entrant or that it will refund the customer if they can find a better price. Management compensation tied to short-term profits may tempt managers to engage in predatory pricing to reap the benefits of boosted sales. Signs of over-investment in order to fold the market in time for the arrival of the new entrant is another credibility issue, as is a dramatic increase in the advertising budget. The Cold War and its nuclear deterrence is a prime example of this behaviour. Attempts of changing the industry structure by partnering and buyouts is also a sign of strategic commitments to uphold the incumbents position on the market.

Due to market experience the established firm and alleged predator has an information advantage over potential new entrants concerning their costs and own cost levels. The power of the predator coupled with the information asymmetry can lead to aggressively low prices and high outputs in order to influence a rivals behaviour (deterring entry), signalling the competition that entry into the market will be costly and ultimately unprofitable, the market conditions are seen as unfavourable which can of course be misleading. A constant and unrelenting strategy in this vein will send strong signals. Strategies include reputation effect, cost signalling, test market and signal jamming. In order to deter market entry, sending signals of low demand is an option for the predator. Before market entry tests are often conducted, a strategy employed by the predator is signal jamming where the firm cuts prices to distort test results making it harder to determine if the market demand is high enough to support its entry. Tests are often used in order to make a decision on entry or exit based on evaluation of future revenues and costs. Cost signalling means drastically reducing prices so that the prey is mislead and believe that the predator has lower costs than themselves.

3.2.1.1 Increasing returns –first mover advantage

Becoming the market leader and making sure that the companies’ product is the reference point in customer evaluations is a tricky path to embark on, the final outcome depend on historical events, timing, the industry environment and the companies internal situation. Other factors that are essential in order to reach the desired goal are the size of the customer base, availability of complementary goods and the companies’ ability to produce product improvements at a certain pace so that the customers aren’t tempted to go elsewhere for innovation. The more a product or service is used the more the likelihood of improvement and refinement. More knowledge is disseminated and complementary products are developed to enhance its benefits even more. The result is a self-reinforcing mechanism that increases the user base. This increasing return of...

89 Grant, R (2002) “Contemporary strategy analysis” Blackwell
90 Bolton, P, Brodley, J & Riordan, M “Predatory pricing: Strategic theory and legal policy”, (1999) Center for Economic research, nr 9982, p 8, 54, 73, 86, 90
adoption has three categories of effect; learning curve effects, network externalities and signalling effects. It goes against the economic theory of diminishing returns where equilibrium of price and market share is believed to exist, the theory implies that any major strategic change like cutting prices below cost will be offset by the very reactions they generate. The lesson to be learned is that the diminishing returns theory still applies to parts of the economy that are resource based like agriculture but in knowledge based industries (products like computers and pharmaceuticals) the increasing returns scenario is more accurate. The large initial investments are followed by sales where incremental production is relatively cheap, one more unit of output cost a lot less than the first unit. The increasing returns model mean that companies or countries for that matter, that gain the initial advantage often tend to stay ahead in that market, the positive feedback economics produces a lock-in scenario which is hard to break. The chance for competitors is if the established player makes mistakes or if the rivals come up with revolutionary products that make the existing product obsolete.91

The reason for aggressive pricing policies that often mean large short-term losses can be explained by the quest for market share and building a large user base. Signalling effects not only work in respect to competitors, they are powerful in the partner and customer realm as well. Once a company becomes market leader and has a large customer base the potential customers who are weighing the options are often swayed by other customers and their choice, the desire to go with the trend is powerful, more powerful than standing out by choosing a niche product. Certain products have characteristics that imply larger benefits with increasing user base (network externalities), for example a file sharing service on the Internet. Having a large customer base can therefore send out signals to new customers, in a sense saying; “since we are the leaders we are also the best, we have higher quality”. Another reason for capturing the most number of users is the reluctance of customers to switch products once they have become accustomed to the proven choice. There are switching costs involved which deter this change such as the time it takes to grow familiar with the new product (learning curve effects) and adapting it to other complementary products. This illustrates the importance of sending signals to partners and developers of complementary products, they are more inclined to produce products to the market leader as this would mean a larger market for themselves, the market leader is often in a position to sign exclusive deals so that rivals can’t reap the same benefit. Other tactics include giving away the product like some web based email services, forming product alliances in order to promote a certain standard (DVD forum for example) and bundling the product to a already successful product in order to reach a large customer base (Microsoft and its inclusion of Internet Explorer web browser in the Windows operative system). In order to reach a desired customer base, short and medium-term profitability is not a priority; the companies often think long-term and can use the concept of cross-subsidization to offset costs. The aim is not always for the product to be profitable, even in the long term. The sale of complementary products that more than make up for the main product’s losses are sometimes the reason for choosing to enter the market. An excellent example is the gaming console market where big players like Nintendo, Microsoft and Sony all make huge losses on the consoles themselves but have huge margins on the games sold that are used on the machines.92

3.2.2 The Concept of strategy
To understand the concept of strategy it is poignant to point out what constitutes a successful strategy. Long-term, simple and agreed objectives, a profound understanding of the competitive environment and an objective appraisal of the firm’s resources and capabilities are all important. The strategy functions like a link (strategic fit) between the firm (the internal environment) and the external industry environment consisting of competitors, suppliers and customers. Strategy has several definitions but a general definition states that strategy is an overall plan of action for deploying resources so that a favourable position (competitive advantage) can be established. It often has military connotations, as the military have been pioneers when it comes to strategy formulation, companies see the market place as a war zone and adopt a suitable strategy to win the war against competitors. Strategy has different roles in a firm, it can function as a decision support system, as a process for coordination and communicating or as a target for the firm. The field of strategic management has evolved from being mostly a budgetary planning and control device in the 50’s and 60’s to corporate strategy in the 70’s. From the early 80’s and onwards the focus has been more on industry analysis, competition and building competitive advantage. This development has divided the concept of strategy into two parts; business strategy which defines competitive advantages and details how the firm should compete, for example by an aggressive pricing policy. The second part, corporate strategy defines industry attractiveness and details what industries the firms should be in (decisions include diversification, vertical integration acquisitions and divestments), this has to be in line with the business strategy so there is a strategic fit between the firms resources and capabilities and the industry it operates in. By studying the goals of the firm (mission statement) it is possible to see if it operates under the shareholder approach (common in the US) or the stakeholder approach (common in Japan and Europe). This influences the strategy chosen and can explain why some firms are more diversified in their stated values, goals and objectives.

3.2.3 Analyzing the industry environment
To fully understand why a firm behaves in a certain manner an industry analysis needs to be conducted. This can explain why a firm feels it is compelled to adopt an aggressive pricing policy, instead of merely labelling the conduct as unlawful a careful industry analysis might reveal it is the rational thing to do in order to be an efficient competitor and not slip behind its rivals. It might also reveal if the opposite is true. As there are a myriad of factors that influence a firm a framework for organizing the information is needed to ease the information overload that analysts and eventually courts will have to face.

One possible model for analysis is the PEST model that considers political, economic, social and technological factors (the macro-economic environment). As this model requires a lot of time to collect a vast array of information it is not suggested as a tool for analysis performed by courts, the information overload factor does not compensate the usefulness of the model. It is most useful after having done a more specific industry analysis as discussed below to show how macroeconomic factors influence the microeconomic environment. What is needed is a model that concentrates on vital information, not only important information. The core of the business environment for a firm is made up of the relationship to customers, suppliers and competitors.

---

94 ibid. p 11-33
95 ibid. p 59-60
An industry analysis is supposed to answer what determines the level of profit in an industry and consequently what strategy a firm must adapt to meet its goals. The profits earned by firms are determined by the value of the product or service (how much consumers are willing to pay), the intensity of competition (the existence of a large number of firms decreases the possible price a firm might charge unless there is collusion between the rivals, see economics section for more on industry structure characteristics) and the relative bargaining power at different levels in the production chain.96

### 3.2.3.1 Five Forces

In order to analyze the industry attractiveness a widely used model is Michael Porter’s Five Forces of competition framework.97 It views profitability of an industry (rate of return on capital relative to cost of capital) as determined by five forms of competitive pressure, resulting in competitive advantages for companies based on their individual resources and capabilities. In conjunction with a PEST analysis and scenario analysis the future, attractiveness of an industry can be mapped. The five sources of competition are threat of entry from new rivals, threat of substitutes, competition from established industry rivals, supplier power and buyer power.98 The Five Forces Model is based on microeconomic concepts like supply and demand, substitute products, the relationship between volume of production and cost of production, and market structures like monopoly, oligopoly or perfect competition.

![Figure 3.2.3.1: Porter’s Five Forces Framework (Porter, 1979)](image)

**Threat of substitutes**

In Porter’s model a substitute product refers to a product from another industry but from an economic perspective a threat of substitution exist when a product’s demand is affected by a price change for a substitute product, for example when the price of apples goes up to a certain level

96 ibid. p 66-71
consumers might change to pears instead. The number of substitutes in existence therefore affects the price elasticity, more alternatives means more elastic demand. If there is a very close substitute to the product this constrains the firms possibility to raise prices. Threat from substitutes exists if there are alternative products with lower prices of better quality that have the potential to attract a significant proportion of market volume. The threat of substitutes is determined by factors like brand loyalty of customers, close customer relationships, switching costs for customers, the relative price for performance of substitutes and current trends.\textsuperscript{99}

**Threat of entry/Barriers to entry**

If firms were free to enter and exit a market the profit would be nominal in the long run, barriers of entry hinder this scenario protecting established companies’ profit levels while at the same time deterring new entrants. They should not be confused with normal equilibrium adjustments that occur when profits increases new entrants arrive but when they decrease because of the increased competition a number of firms leave the market. These are normal adjustments, barriers to entry occur when firms individually (collective action would be illegal) keep prices at an artificially low level to deter new entrants, as is the case when prices are deemed predatory. Typical barriers of entry include; economies of scale (minimum size requirements for profitable operations), capital requirements like high initial investments and fixed costs, absolute cost advantages of existing players due to experience curve effects of operation with fully depreciated assets, brand loyalty of customers and close relationships developed over time (important if the market consists of a wide variety of differentiated products), protected intellectual property like patents, licenses etc, scarcity of important resources, access to raw materials is controlled by existing players, distribution channels are controlled by existing players (for example fighting for shelf space when launching a new product, supermarkets are vary of the gamble), high switching costs for customers and legislation and government action (for example granting of exclusive licenses, emission and safety standards or the granting of a natural monopoly because one firm can produce the product or service more effectively than several). Another form of entry barrier is a credible threat of retaliation; this may come in the form of aggressive price-cutting, increased advertising, sales promotion or vexatious litigation. The effectiveness of entry barriers depends on the resources of the entrants (big firms may cross-subsidize in the beginning) and if they use an innovative strategy to circumvent existing barriers, for example Dell’s use of direct sales to bypass the control over distribution channels existing rivals like IBM had.\textsuperscript{100}

**Rivalry between established competitors**

High competitive pressure between established companies’ results in pressure on prices, margins, and consequently profitability for every company in the industry. Competition intensity is high when there are many players of similar size employing similar strategies, when there is not much differentiation between firms and their products (little price competition), low market growth rates, high fixed costs (forcing firms to produce at near capacity to have low unit costs, common in the airline industry where variable costs are very low, taking on additional passengers cost almost nothing extra and therefore a low price can be offered to fill the plane), low switching costs for consumers, the existence of excess capacity (resulting in price cuts to attract new business and spread fixed costs over a larger sales volume, this often occurs cyclically or when an industry is in a declining stage) and barriers for exit (for example when asset specificity

---

\textsuperscript{99} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 72-74

\textsuperscript{100} ibid. p 74-76
(specialized equipment) is high and a firm endures heavy losses if it writes of the investment) are high. To compete companies try to establish competitive advantages, this can be done in several ways including; price changes, product differentiation or by using some form of vertical integration to offer a better product or service. An important factor to consider when analyzing the intensity of competition is the concentration ratio (number and size of competing firms and their combined market share). A low number of firms means more control over price, in oligopoly situation parallel pricing is common if not outright collusion is attempted, in duopoly situations firms compete more on advertising and product development. This sort of behaviour categorizes a disciplined market where a code of conduct is implicit or there is a dominant firm that sets the agenda. A larger number of firms mean more difficulty in coordinating decisions.101

**Bargaining power of buyers**
The bargaining power of buyers determines how much customers can impose pressure on margins and volumes. Strength of bargaining power depends on the buyer’s price sensitivity and their relative bargaining power. Buyer bargaining power is high when they buy large volumes (often when there is a concentration of buyers with good information about suppliers and cost), the supplying industry comprises a large number of small operators and operates with high fixed costs, the product is undifferentiated and can be replaced by substitutes, switching to an alternative product is relatively simple and is not related to high costs. Additional factors include; when buyers have low margins and are price-sensitive, buyers are able to produce the product themselves, the product is not of strategic importance for them and there is the possibility for the buyer of integrating backwards. A market where there are several producers but only one buyer is referred to as a monopsony where the buyer has power over price. This situation is rare.102

**Bargaining power of suppliers**
The term supplier comprises all sources for inputs that are needed in order to provide goods or services. Supplier bargaining power is high when: the market is dominated by a few large suppliers, there are no substitutes for the input, the suppliers customers are fragmented meaning their bargaining power is low, the switching costs from one supplier to another are high. Because of this there is the possibility of the supplier integrating forwards in order to obtain higher prices and margins. This threat is especially high when the buying industry has a higher profitability than the supplying industry, forward integration provides economies of scale for the supplier, the buying industry hinders the supplying industry in their development (e.g. reluctance to accept new releases of products), the buying industry has low barriers to entry. In such situations, the buying industry often faces a high pressure on margins from their suppliers. The relationship to powerful suppliers can potentially reduce strategic options for the organization.103

**Influencing the five forces of competition**
After analyzing the current and potential future state of the five competitive forces, companies try to influence these forces to benefit their interest. The objective is to reduce the power of

---

101 ibid. p 77-80
102 ibid. p 80-82
103 ibid. p 82
competitive forces. Although the following suggestions are general in nature, they have to be altered to fit each firm’s specific situation.\textsuperscript{104}

**Reducing the threat of substitutes**
To reduce the threat of substitutes legal action can be taken if the firm feels that there is risk of confusion on behalf of the consumers, the product differences can be accentuated, the firm can enter the substitute market and influence it from within by increasing switching costs or buy establishing alliances with a firm on the substitute market to reduce risk.

**Reducing the threat of new entrants**
Here the firms options include increasing minimum efficient scales of operations, creating a strong brand image (loyalty as a barrier), apply for patents, protection of intellectual property, establish alliances with linked products/services, tie up with suppliers and distributors and retaliation with a suitable tactic like aggressive price cuts or an advertising blitz.

**Reduce rivalry between established rivals (legal options)**
Possible legal strategies include avoiding price competition by competing on advertising, product quality (product differentiation, focusing on different segments) or promotion; this requires that competitors communicate with each other. Mergers or complete buyouts of rivals that pass antitrust regulators are other options often used by large firms. Reducing over capacity will reduce the risk of price wars breaking out.

**Reducing buyer bargaining power**
To reduce the power of the buyer purchase decisions can be moved away from price. Partnering with rivals to increase relative bargaining power and cutting out intermediaries by going directly to the customer are also viable options. Creating incentives and value added products that buyer are willing to a premium for is another tactic that can raise profitability.

**Reducing supplier bargaining power**
Partnering and increased focus on supply chain management and training are possible avenues to explore when trying to reduce supplier bargaining power. Acquiring valuable information of supplier cost and methods is an essential step in order to take over the supplier and bypassing them altogether.

**Critique**
Porter’s model of Five Forces has been subject of critique. Its main weakness stems from the historical context in which it was created. The early 80’s was characterized by cyclical growth in the global economy resulting in primary corporate objectives consisting of profitability and survival. This meant that strategy has to be optimized in relation to the external environment. Up to this point development in most industries had been fairly constant and predictable, compared with today’s dynamic environment.

The usefulness of the model is reduced by the following factors: The framework assumes a perfect market and static market structures (not considering technological breakthroughs), which

is very rare. Porter’s had to revise the model a few times and has written an article discussing the influence of the Internet on the industry analysis model. There is lack of empirical evidence regarding the importance of industry environment for profitability. The complexity of some markets with multiple interrelations, product groups and segments requires a time consuming and difficult analysis. It also doesn’t place focus on the possibility of companies opting out of competition and going for strategic alliances and other forms of collaboration. Economic theory identifies two forms of relationships between different products, substitutes and complementing products, which add value to the core product. Complementing products is thought of as a missing dimension of the Five Forces model, sometimes referred to as the sixth force. The more complements that exist and the closer relationship they have to the core product the greater is the profit potential. Relationships with the suppliers of complements have to be closely managed so that customers see the whole system in a favourable light. It is possible to argue that Porter’s original model takes this relationship into account in the force labeled bargaining power of suppliers.

Porter’s model is still widely used because no other easy to use and understand model has replaced it although modifications have been made. The dynamic nature of certain industries today have made Schumpeter’s theory of creative destruction (innovation and entrepreneurship are the driving forces behind competition, favorable industry structures sow the seeds of their own destruction by providing incentives for firms to attack established positions through new approaches to competition) popular again and some scholars even argue that there is hypercompetition (intense and rapid competitive moves where competitors must move quickly to build advantages erode advantages of rivals). The relevant question is if industry structure still can be used as a guide to the nature of competition and industry performance in the future. This is especially true in markets where structural change in the industry is rapid, new substitutes appear quickly and innovative competition methods are abundant.

108 To take the Five Forces model into a more modern setting taking the IT revolution into consideration Larry Downes, states in his article “Beyond Porter” (available at: http://www.contextmag.com/setFrameRedirect.asp?src=/archives/199712/technosynthesis.asp ) that Porter’s assumptions are no longer viable. He identifies three new forces that require a new strategic framework: digitalization (as power of IT grows, all players in a market will have access to more information allowing new business models to emerge where players from outside the industry are able to change the basis of competition in a market), globalization (improvements in distribution logistics and communications have allowed businesses to buy, sell and cooperate on a global level. Customers have the chance to compare prices globally. Global and networked markets impose new requirements on companies’ strategies. Price-leadership or quality-leadership is not enough anymore, competitive advantages emerge now from the ability to develop lasting relationships to more mobile costumers and to manage far-reaching networks of partners for mutual advantage), and deregulation (the past decade has seen government influence shrink in many industries like airline, communications, utilities and banking in the US and Europe. Faced with the new opportunities and challenges of IT, companies in these industries were able and forced to restructure their businesses).
3.2.3.2 Key success factors
To understand why a firm adopts a certain strategy it is essential to identify the factors within the firm’s market environment that determines the ability to survive and prosper, its key success factors (KSF). There are two basic questions that need to be answered before KSF’s can be determined; what do the firm’s customers want and what does the firm need to do to survive competition. The first question details who the customers are, their needs and preferences. The second question deals with what drives competition, what are the main dimensions of competition, how intense is the rivalry and how the firm can obtain a superior competitive position. This kind of analysis requires deep understanding of the relevant market and industry but is not to be seen as a blueprint for success, there are no generic strategies.\textsuperscript{111}

3.2.3.3 Competitor analysis
Because of the limitations of game theory discussed above more conventional approaches of analysing competitor behaviour has been adopted, which emphasizes acquiring information (competitor intelligence) about competitors and predicting their behaviour. This facilitates the firm’s understanding on how competitors might respond to a chosen strategy by the firm. It is a fast growing strategy tool in today’s marketplace.\textsuperscript{112} To sort through all the information a framework that singles out the most pivotal information is needed. The first step is to identify current strategies where a distinction between intended (statements) and realized (actions and decisions) strategy has to be made. Depending on the goals and values of the company the company can speak with two different voices, one to investors and another to other stakeholders. The second step is identifying the competitor’s objectives, which can reveal how it might change strategy in the future; poor performance is often a sign that change is on the way. Companies with short-term profits as a main priority behaves differently than a company with market share as a main objective, competitors who are subsidiaries to larger firms also have the possibility of pursuing a cross-subsidization strategy to offset losses. It also recommendable to map competitors’ assumptions about the industry and what they consider to be determinants of success. It might present a new entrant with an opening if the established rival ignores potential growth segments. The fourth step includes the identification of a competitor’s resources and capabilities to see how the competitor can respond to a challenge or change in the market place. Factors to consider are financial reserves, capital equipment, work force, brand loyalty, management skills and the strengths of each business function in the company. Once competitors are mapped they can be placed in strategic groups (group of firms in an industry following a similar strategy) based on factors like product scope, choice of distribution channels, product quality, degree of vertical integration, etc.\textsuperscript{113} This grouping of companies facilitate the process of relevant market definition and whether a firm is to be considered dominant in a particular market. After this analysis there is a better understanding of the competitors, which results in possibilities of influencing their behaviour, game theory can be used by the application of deterrence, signalling and changing the structure of the game.\textsuperscript{114}

\textsuperscript{111} ibid. p 95-100
\textsuperscript{112} ibid. p 113-114
\textsuperscript{113} ibid. p 127
\textsuperscript{114} ibid. p 115-118
3.2.3.4 Segmentation analysis

In order to judge if a company is dominant, which is a prerequisite for the majority of abusive behaviour cases the industry and market needs to be defined. A very narrow definition of a market can have huge implications on the outcome as the company might appear dominant on that market but in actuality it operates on a wider market where several competitors exist, reducing its dominance. An industry is defined as a group of companies that supply a market. The relevant market has two dimensions, product and geographic market where substitutes on both demand and supply side need to be considered (see section in EC legislation for more). The time frame of the market decisions is another factor to consider. A detailed segmentation can identify the most profitable customer and geographic markets for a company to allocate resources to. Each segment also has different KSF’s. Segmentation analysis consists of five stages. The first stage is about identifying key segmentation variables, which are related to the characteristics of the product and the customers and divide the market in terms of demand-side substitutability for customers and supply-side substitutability for producers. Only the ones with strategic significance and those that are closely related are chosen to ensure that the analysis is manageable. The second stage involves the creation of a matrix for easy comparison of each and the third involves a segment attractiveness analysis where the Five Forces model can be applied with some minor differences. Competition from substitutes considers not only outside the immediate industry but also from other segments within the industry. Instead of barriers of entry there are barriers to mobility to analyze as the new entrants are likely to come from rivals from the same industry attracted by the profitability level in the segment. A new segment does not always translate into profits as customer demand might be lacking. The fourth stage involves the identification of specific KSF’s. The fifth and final stage involves selecting segment scope, shall the firm specialize or diversify? The choice depends on two main factors, the similarity of KSF’s and the presence of shared costs across the segments. High similarity and shared costs mean that the firm can adopt a similar strategic approach in the different segments. This discussion is analogue to choices of specialization and diversification in the value chain or the launch of a new product or service.

3.2.4 Resources and capabilities

Understanding a firm’s chosen strategy depends on the competitive environment but the most important analysis that investigators have to make concerns the accused firm itself. A task that requires knowledge about resources and capabilities of the firm, which explain what competitive advantage it possesses. In the 90’s the notion that a firm’s strategy was based on its resources and capabilities became mainstream, the principal work behind this theory was done by Barney and his resource based view of the firm. It has become popular in today’s dynamic market place since the traditional focus of identifying company goals by focusing on the industry and business itself has become harder as the market is in constant state of flux. By focusing on the company itself a more tenable approach has been found. The industry attractiveness approach targets monopoly rents, i.e. profit from lack of competition while the superior resources approach targets

---

115 ibid. p 86-87
116 Value chain refers to the chain of activities ranging from R&D, manufacturing, marketing, sales, distribution and after-sales services. Porter classifies the activities into primary activities (involved with transformation of inputs and interface with customer) and support activities (HRM, infrastructure, procurement, etc). See Grant, p 146-148.
117 ibid. p 119-125
Ricardian\textsuperscript{118} rents, profits from the possession of superior resources. Porter’s Five Forces model and the barrier to entry section acknowledges the importance of patents, brands, distribution channels, learning curve effects, etc which take time and resources to acquire. The resource-based view emphasizes the uniqueness of each company instead of telling companies to do the same as other companies; the key is to exploit differences suited to the resources and capabilities of the firm. A proper analysis of the firm’s resources and capabilities also reveal what possible strategies the firm might take in the future, not only why it behaves the way it does today.\textsuperscript{119} A common classification framework is to divide the resources into three categories: tangible (financial and physical), intangible (technology, reputation, brand, patents etc) and human (intellectual capital and corporate culture). The first two categories are what the firm can use to set up barriers to entry for other firms, for example by using financial strength to cross-subsidize and set prices at below cost or protect market share by having a patent. Human resources is increasingly becoming the most important factor since it represents a chance of building and sustaining a competitive advantage.\textsuperscript{120}

Capabilities refer to the firm’s capacity to undertake a production capacity, the key is to identify what capabilities in the value chain the company performs best, its core competences and potential competitive advantage. Capabilities are often tied to organizational issues and therefore very hard for outsiders to judge. To establish a competitive advantage the resource or capability must be rare, valuable and relevant. To sustain the advantage require that it is hard to imitate, easy to leverage into a capability (for example transferring tacit knowledge of employees into explicit knowledge so that it can stay in the firm even if the employee leaves), hard to transfer and durable. Resources and capabilities can be benchmarked with market leaders to judge how far the firm has to go or how rivals are. Developing the necessary resources and capabilities can be time consuming, which explains why firms merge and acquire each other, they try to find complementing capabilities and resources that will help in increasing profit and market share.\textsuperscript{121}

\textbf{3.2.5 Competitive advantage}

Competitive advantage can be defined as:

“When two or more firms compete within the same market, one firm possesses a competitive advantage over its rivals when it earns or has the potential to earn a persistently higher rate of profit.”

Profitability is not the only measure of competitive advantage, some companies are more focused on long term growth and market share, customer satisfaction, employee benefits, best environmental record, etc. Competitive advantages can as discusses above come from the external or internal environment (innovative corporate culture), fast and flexible responsiveness to change can in itself be a competitive advantage. This requires good competitor and market intelligence. A truly innovative company often changes the rules of the game by overturning the

\begin{itemize}
  \item \textsuperscript{118} David Ricardo, the British 19th century economist who explained why fertile land was able to earn higher returns compared to less fertile land even when the wheat market was competitive. See Grant p.137
  \item \textsuperscript{120} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 139-144
  \item \textsuperscript{121} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 227-235
  \item \textsuperscript{122} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 152-156
\end{itemize}
value chain structure, either by bypassing intermediaries (disintermediation) or adding new ones (reintermediation). To sustain the advantage the firm often tries to obscure the superior performance, for example by showing loss, this coupled with previous actions can act as a deterrent for new entrants and pre-empt the arrival of more competitors by exploiting all available investment opportunities. These measures are often unlawful and the best way to preserve the advantage is to build a valuable, rare, hard to replicate (multidimensional) and durable advantage.\textsuperscript{122}

Competitive advantage can be achieved in two ways; a firm can pursue cost leadership (supplying an identical product at lower cost) or supply a product that is differentiated in such a way that customers are willing to pay a premium price exceeding the additional cost of differentiation. These two avenues are represent radically different approaches of doing business and must be considered when an allegation of predatory pricing is being investigated. Cost advantage companies are adept at offering the lowest possible price without there being any malicious conduct. A firm can choose either of the two, pursuing both results in what Porter calls “stuck in the middle” where profitability is low since the firm loosens out to firms who have specialized on one strategy. There is a third option, where the focus is set on a single segment within the industry as discussed above under segmentation analysis. It must be said that the Japanese concept of total quality management has succeeded in pursuing both advantages. In the mind of the consumer it is difficult to occupy both strategies, a low cost brand is not considered to be of as good quality as the differentiated one with a reputation of high quality, sometimes augmented by a high price.\textsuperscript{123} Basic sources of cost advantage stem from the experience curve effect\textsuperscript{124} and include economies of scale and learning, improved process technology and process design and improved product design. Additional factors include capacity utilization, input costs (for example location advantages, ownership of low cost sources of supply, non-union labour and bargaining power), the resulting difference in cost efficiency that can not be explained by these cost drivers is called residual efficiency and might be explained by internal competitive advantages linked to the human resources. The value chain can be used to break down the activities and identify the cost drivers to see where the firm has cost advantages. The analysis consists of the following stages; disaggregate the firm into separate activities, establish the relative importance of different activities in the total cost of the product, compare costs by activity, identify cost drivers and linkages between the activities. This will reveal where opportunities for reducing costs exist.\textsuperscript{125}

Differentiation advantages do not only focus on physical product characteristics (tangible), it also takes into account what ever the customer sees as an influence of value (intangibles such as social, emotional, psychological aspects that expresses themselves in desires for status, exclusivity, individuality and security). It is built into all activities of the company and even exists in the corporate culture, ultimately it relates to the firm’s responsiveness to customer requirements and how a firm competes. Differentiation strategies are considered to be more sustainable than cost strategies since emerging economies easily can compete with low labour costs. Successful differentiation depends on the firm’s ability to match customer demand (product

\textsuperscript{122} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 246-249

\textsuperscript{123} The experience curve effect states that as output increases cost per unit decreases.

\textsuperscript{124} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 257-271
positioning and customer preferences) with their own ability to supply. This can be done by constructing a value chain for both the firm and the customer to see where there are possibilities of matching needs. Drivers of uniqueness include product features, complementary products (bundling), marketing activities, technology, quality of inputs, employee skill, location and degree of vertical integration. Effective communication of the differentiation is vital, for example by using the brand to send a signal. Because of the added cost structure of differentiation this strategy is more common with companies that have been in the market for a relatively long period of time.126

3.2.6 Strategic Pricing
Price is defined as the amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or service.127 With the advent of the Internet the possibility of customized service and marketing has introduced the concept of dynamic pricing, i.e. the practice of charging different prices depending on individual situations and customers, this is possible both for consumers and to organizational buyers. Prices are in the business world not only about the cost base, it has other connotations that are as important and which can explain why the price differs for different customers without there being any intent of exclusion of competitors, often it is just basic business sense. As explained above price decisions are dependent on the internal (costs, organizational resources and capabilities, goals and values) and external environment (nature of the market structure and demand, competition, environmental factors like economy, social policy and legislation). They are also dependent on customer perception of value. There are a number of approaches that can be taken to set the price, which need to be analyzed before judging the pricing policy unlawful.

**Cost-plus pricing**: This entails adding a standard mark-up to the cost of the product, this is common for lawyers and accountants but also for aerospace companies selling to the government. Although this model is questionable as it ignores demand and competitor prices it can lead to very low prices for the customer if the company has a low cost structure. It minimizes price competition and is fair to both buyer and sellers, as it doesn’t take advantage of higher demand situations.

**Break-even pricing** (target profit pricing): Here price is set to break even on the costs of making and marketing a product; or setting price to make a target profit. The price-demand relationship is not considered which may make calculations invalid.

**Value-based pricing**: Price is set based on buyer’s perception of value, not on seller’s cost level. This is opposite to cost-based pricing which places the product as the center of decisions. This method is hard to implement as assessing customer perception of value can be tricky, it can result in overpricing and poor sales or under pricing and less revenue than if the right level had been chosen. Another approach is value pricing, where the company offers just the right combination of quality and service at a fair price, it often entails bundling the product with complementary products to add value.

Competition-based pricing: The firms sets prices based on what the competition charges for similar products. This is common in oligopoly situations where price wars are avoided.

New product pricing: As prices change over the product life cycle because of cost and demand changes. The introductory stage is especially challenging, as there are a lot of unknowns.

Market skimming pricing: This method involves setting a high price for a new product to skim maximum revenues fro each segment layer that are willing to pay the high price. The company makes fewer but more profitable sales. It targets innovators and early adopters. Certain condition need to be fulfilled for this strategy to work; the quality and image of the product must support the high price, there must be enough buyers, the cost of production can’t be too high and there should be significant entry barriers to keep out competitors.

Market-penetration pricing: This strategy entails setting the price at a low level to attract a large number of buyers and a large market share. High sales volume means falling production costs and further price cuts. This strategy requires that the market is highly price sensitive and production costs must fall as sales increase, lastly the low price must act as an entry barrier for new entrants.

Product mix pricing strategies: The price of a product often has to be changed if it is part of a product mix. There are a number of pricing strategies to consider. Product line pricing: setting the price steps between various products in a product line based on cost differences between products, customer evaluations and competitor’s prices. Optional product pricing: Pricing of optional or accessory products along with main product. Captive product pricing: Setting a price for products that must be used along with core product. By-product pricing: Setting a price for by-products so that main product price is more competitive. Product bundle pricing: Combining several products and offering the bundle at a reduced price.

Price-adjustment strategies: To adjust for changing customer preferences and other factors prices will be adjusted in a number of ways. A company can simply offer a discount or pay a retailer more money to feature the product in a certain way. Segmented pricing is a contentious strategy as it means selling the same product at a different price for different customer segments without there being a difference in costs. The reasons for this strategy can be explained by location or time factors. Psychological pricing takes the psychology of prices into consideration, not only economics, the price is often used to make a statement, for example high price equals high quality or status. Promotional pricing can sometimes be seen as predatory as it entails setting the price below cost to increase short run sales, often in the introductory stage. The trick is not to make customers used to these promotions as this might hurt the company in the long run. A company also has the choice of setting prices dependent on geographic location or country based evaluations.

To respond to competitor price changes a company can choose between a variety of options. Prices can be cut or increased and can evoke very different reactions from suppliers, competitors,
customers, distributors and even the government. Another option is to launch low price brands or raise the quality to a level beyond the competition’s.\textsuperscript{128}

3.2.7 \textbf{Industry life cycle strategies (industry evolution)}

The industry life cycle mirrors the product life cycle (has the same stages and is industry specific) but extends over a longer period of time since a company can produce a range of products in its existence. By applying the industry life cycle instead of the product life cycle it is possible to judge a company’s behaviour over a longer period of time and establish a modus operandi. Two factors are fundamental to the understanding of the model, demand growth and creation and diffusion of knowledge. The trend today is that IT is compressing the life cycle span but also helping to rejuvenate some industries with major innovations.\textsuperscript{129} A firm needs to adapt and match organizational resources and capabilities to suit the different characteristics of each stage, the challenge is to cope with dual strategies, one to deal with the current situation and at the same time preparing for the future. By using scenario analysis a company can make educated predictions about the future based on a thorough understanding of today’s industry and the companies that occupy it, macroeconomic factors also need to be considered, which is where the PEST analysis becomes useful. Depending on the industry scenario analysis consists of three to four scenarios set 10-20 years ahead. It is a useful technique for comparing future conduct and intent with past behaviour. The main contribution of scenario analysis lies in the process, to conduct the analysis intimate knowledge about the business is required, which is essential in predatory pricing investigations.\textsuperscript{130} Disruptive technologies that shake the industry are very hard for established companies to deal with in time before new rivals are dominating the market, M&A is a viable option.\textsuperscript{131}

\textbf{Introduction stage:} The emergence of the industry, the introduction stage is characterized by small sales, low market penetration because of unknown products and few customers (only the innovators and early adopters in advanced countries). Lack of experience, the novelty of the technology, the small production scale result in high cost and price while quality is relatively low. There are competing technologies, rapid product innovation with a wide variety of features and designs. Manufacturing and distribution is high skilled and specialized. At this stage the number of companies remain relatively low as profit potential is still unproven (this varies widely depending on industry, in the computer industry there is a history of many start ups in the emerging stage). Key success factors include product innovation and establishing a credible image of the firm and the product.

\textbf{Growth stage:} As prices fall and product technology becomes more standardized (a dominant design or technology emerges which is why it is important to gain market share in the beginning even if this means giving the product away or selling it for a very low price, increasing returns theory states that profits will be recouped in the long run) market penetration increases. Early majority of customers are now users (exports to the rest of the world take place) and the quality improves. Manufacturing and distribution is now at the mass production level and firm’s compete

\textsuperscript{128} The section “Strategic pricing “ is based on : Kotler, P and Armstrong, G “Marketing: An Introduction” (2003), Prentice Hall, New Jersey, chapter 10
\textsuperscript{129} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 305, 309
\textsuperscript{130} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 318-323
\textsuperscript{131} Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 317-318
for distribution channels. At this stage a vast number of companies enter the market, tempted by profit potential, some mergers also occur to gain market share, firm’s unable to keep up with the pace exit. Key success factors include product design, access to distribution, building a strong brand, fast product development and process innovation.

**Maturity stage:** Market saturation causes growth to slow as demand is now more replacement oriented. Customers (mass market) have more information and are thus more price sensitive. The technology is well diffused and improvements are sought after. The products are becoming commodities and companies attempt differentiation strategies with focus on brands, quality and bundling with complementary products to enhance value. A successful strategy may involve finding attractive segments where customers with the greatest profit potential exist; narrowing the market the company operates on. It is essential that the innovative spirit lives on in order to increase the possibility of firm rejuvenation. At this stage overcapacity becomes a reality, there are long production runs and distributors carry fewer lines. Production has shifted to newly industrialized countries and developing countries. There is a shakeout in the industry with price competition as a result in order to keep market share. Key success factors at this stage includes cost efficiency through capital intensity, scale efficiency and low input costs. High quality products are important to differentiate and avoid price competition.

**Decline stage:** Finally the industry becomes challenged by new industries producing superior substitute products making the old obsolete. The transition from maturity to decline can for example be the result of technological substitution, changes in customer preferences, demographic shifts or foreign competition. Only the most loyal customers remain. It needs to be said that some industries never reach this stage as the supply products that are essential for consumers, for example the food industry. There is little product or process innovation and commodities are the norm, differentiation is difficult and unprofitable. Possible strategies include becoming a leader or a niche player, divest quickly or choosing a harvest strategy meaning that the firm maximizes cash flow from existing assets without undertaking any further investments. The choice of strategy heavily depends on a proper understanding of the macro and micro economic environment. There is constant excess capacity and specialty channels for distribution re-emerge. Production takes place predominately in countries with the lowest labour costs. Because of the excess capacity price wars are common and many firms exit as a result of the low profitability, depending on the difficulties of overcoming the exit barriers. Key success factors include low overheads, buyer selection, signalling commitment and rationalizing capacity.

---

132 To assist in the portfolio planning analysis the GE (General Electric)/ McKinsey Matrix can be applied which measures industry attractiveness contra the competitive advantage of the firm and its units. Industry attractiveness is based on the following factors: market size, market growth, industry profitability, cyclicity of sales, inflation recovery and the importance of international markets. Competitive advantage is based on market position of the firm, competitive position in regards to quality, technology, manufacturing, distribution, marketing and costs and lastly return on sales relative to competitors. The recommendations that result from the analysis are categorized as grow (good profit potential, the company should invest more), hold (medium profitability and competitive advantage) and harvest (no more investment, only thing remaining before exit is to maximize cash flow). The model shows where a company should allocate its resources. See Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 480-482

133 Information regarding the four stages from: Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 310-316
3.2.8 Corporate strategy

Corporate strategy is primarily concerned with where the company should do business and what industries to focus on. Decisions concern product scope (specialization), geographical scope and vertical scope (backwards and forwards). The underlying reason for why a company chooses to expand or outsource often goes back to the basic concept of transaction cost which can be described as “the time and money expended whenever people and companies exchange goods, services or ideas”. Vertical integration in either direction has been popular in stages, the current trend is pointing towards specialization. Backward integration occurs when the firm takes ownership and control of producing its own inputs. Forward integration occurs where the firm takes ownership and control of its own customers. A firm with full control of the entire value chain can end up with enough power over the industry that they become a virtual monopoly in their industry but also in related industries when they expand, competitive forces from suppliers and other rivals is virtually non-existent, entry barriers are high and buyers possess little power as there are no rivals to the firm. The only competitive force is substitute product but the firm can use its strength to move into these related industries to enforce its position, Microsoft is a prime example of a firm employing this strategy. Vertical integration is not all positive from a company perspective, it can be costly and hard to control all links in the chain, especially if market demand is uncertain and flexibility is necessary because of a fast changing market place.

3.2.8.1 Multinational strategies

As companies enter new geographic markets it is important to analyze their entry strategies based on what type of international company they are. When choosing which market to enter the analysis takes on another dimension, it is not enough to consider the firm’s resources and capabilities, the industry environment and key success factors, it is also essential to consider the national environment of the geographic market the firm enters. There has to be strategic fit between all these factors for the company to be successful, a firm is not advised to diversify into

---

unrelated industries as has proved to be disastrous in the past. To analyze the national environment Porter’s National Diamond model can be applied.¹³⁶

Figure 3.2.8.1: Porter’s National Diamond (Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 418)

Four attributes of a nation comprise Porter’s “Diamond” of national advantage; factor conditions (the nation's position in factors of production, like skilled labour, national resources, capital and infrastructure), demand conditions (it is the primary driver of innovation and require sophisticated customers in the home market in order for incentives for high quality products to arise), related and supporting industries (the existence of clusters often help like in Silicon Valley), and firm strategy, structure and rivalry (conditions for organization of companies, and the nature of domestic rivalry). These attributes must conform to the requirements for a sustainable competitive advantage (rare, valuable, hard to replicate, durable) discussed above. After careful analysis the company may choose to locate specific activities of the value chain in different countries depending on the comparative advantages of each country. A comparative advantage can arise because of first mover advantage and historical reasons and is sustained by the theory of increasing returns; it is hard to unseat the dominant player, for example breaking the Swiss dominance in the luxury watch market. Governments can influence all four of Porter’s determinants by subsidizing domestic firms, either directly (money) or indirectly (infrastructure), by tax policy that affect flow of capital, educational policy that effect skill of workers, company law, environmental legislation etc. The model has been criticized for being based on case studies and that it only applies to developed economies. Porter has developed the model and applied it to developing countries such as those in Latin America. The model makes a distinction between outward and inwards foreign direct investment in regards to how they affect competitive advantage, Porter argues that only outward FDI is positive in that regard but there is little empirical evidence to support that claim. Furthermore the model does not adequately focus on the

role of MNC’s (multinational corporations) as there is evidence that suggest that have a relatively big influence on the Diamond factor’s.  

Depending on whether a firm’s competitive advantage is firm specific or country specific it can choose entry strategy by either focusing on transactions (country based advantage) like exporting, licensing or franchising or direct investments (firm specific) where the firm engages in joint ventures (strategic alliance), acquisitions (M&A) or establishes a subsidiary (organic growth). This often requires adding additional resources and capabilities, for example in marketing and distribution, to adjust to local conditions. Deciding on the transaction or direct investment strategy often depends on the transaction cost involved in the former strategy, if negotiating a contract, monitoring and enforcing the terms is costly a firm may opt for the direct investment approach unless the red tape involved with setting up subsidiaries etc are too high. The benefits of a global diversification strategy can be realized as customer preferences are being globalized to an extent (the brand therefore is important as communicating device), other benefits include growth, risk reduction (not being reliant on one market), scale and scope economies made possible by global production, marketing and product development, competitive leverage by providing multiple bases for competitive attacks and the potential to use global resources in competitive initiatives within individual countries. The key aspect of the leveraging benefit is cross-subsidization where a firm uses cash flow from a country where market position is strong and profitable to finance competition against nationally focused competitors in other markets. Predatory pricing is likely to be banned but cross-subsidization can also take the form of heavy advertising, sales promotion and dealer support. Some MNC’s opt for a more multidomestic approach where each geographic market has a fairly autonomous national subsidiary that controls most activities of the value chain. Since the early 90’s a new breed of multinational began to take form, this is the transnational company who tries to benefit from both economies of scale resulting from global integration and at the same time differentiate itself to adapt to national conditions. This requires elements of both centralization and decentralization. Operations are global but markets are local is the mantra. This form of organization requires that the organization changes its structure to accommodate to the differing needs of each national unit.  

3.2.8.2 Mergers

Growth can be achieved in several manners, organic growth where the firm relies on its own resources and capabilities to grow and gain market share, an aggressive pricing policy can be one way to achieve this. Other ways to grow include strategic alliances with either horizontally or vertically, which would produce access to new markets and greater efficiency in operations. By going one step further a company can acquire another or by merging with it in a 50-50 merger. This would mean more market share, more financial strength but not necessarily more efficiency as organizational issues and corporate cultures often clash. This implies that M&A is not a more cost effective way of achieving market leadership than by using pricing strategies that go below cost. Other hurdles with M&A that may prove costly is regulatory issues like if it would produce market dominance and that the new firm would have control over prices. It is easier to punish a

company by its M&A activity than proving it has engaged in predatory pricing, the aim is the same but the legal situation is clearer in the M&A field both in the US and EU.  

3.3 Business law

As a precursor to the following discussion it is important to appreciate the different legal systems that are present in the US and EU. The different legal systems have a big impact on how cases are approached and consequently analyzed. In the US the legal system is based on what is known as the common law system, which is a system that is built around cases. One case acts as a precedent for the next and so on. This can explain the US Supreme Courts approach to predatory pricing analysis, early cases were influenced by the Chicago School of thought and the price cost analysis of Areeda-Turner. This meant that subsequent cases have had a tough time to change the skeptical approach to the occurrence of predatory pricing. The EU legal system is if anything a mix between the common law system as practiced in the UK and US and the civil law system as practiced on the European Continent, for example in France. The civil law system is built around statutes and codifications, as evident by the EC Treaty and various regulations and directives. In this system each case is judged on its own merits, i.e. if it complies with the law or not, each case is unique. The ECJ and CFI rely on a mix of these two different legal cultures, every case is judged based on existing legislation, in the case of predatory pricing it is art. 82 EC but previous case law is also referred to as can be understood when reading through a court ruling. This means that the predatory pricing cases are judged more on a case-by-case basis than by US courts, resulting in predatory pricing being recognized at a greater frequency than in the US.

3.3.1 The characteristics of competition

Competition can be described as a form of contest for the acquisition of as many customers as possible or a contention for superiority. In the quest for the number one position companies will strategize and conduct themselves in different manners. Competition is generally considered to be good but some strategies employed by the competitors might be negative for competition itself resulting in too little competition. Competition law and relevant authorities therefore have a job to protect consumers and secure an adequate level of competition. Determining what level of competition is adequate presents some challenges and depends on the underlying goal of competition law. Should it for example be fair, efficient or perfect competition? Predatory pricing, which is a contentious issue to begin with, raises all of the above questions and considerations. The connection between law and economic/business is a difficult issue to discuss, in the interest of competition how much interference from the law should there be? In the US antitrust authorities have been active since the beginning of the 20th century but the level of regulation in competitive matters have shifted depending on the political climate at the time, academic debate has also been an influence. In the field of predatory pricing the current view in the US favours minimal intervention as it is more seen as a legitimate business strategy for efficient firms. The underlying attitude is that the only entry barriers relevant to the assessment of the relevant market and a dominant position are those who keep out equally efficient firms. In the EU which has had less experience regarding these matters the prevailing attitude is that companies have to prove that the conduct is not damaging to competition and consumers.

---

When trying to find a theoretical framework to apply to predatory pricing it is necessary to understand how competition is perceived. The European concept of competition has been influenced by the Freiburg school which believes that competition is vital but eventually tends to be destroyed. The need for competition law is therefore clear. The Treaty was influenced by theories of workable competition which were prevalent between 1930 and 1950. Despite this influence no consistent approach exist which is reinforced by the fact that the Courts in the EU use a teleological method of case interpretation. This is backed up by evidence suggesting that no competition theory is used as a reference model in EC competition law which is in contrast to the US who at different times have followed specific schools of thoughts like the Chicago school or the Harvard school.

3.3.2 Literal interpretation

Art. 82 EC prohibits any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it and deems it incompatible with the common market if it affects trade between Member States. Abuse may consists of directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions, limiting production, markets, or technical development to the prejudice of consumers, applying dissimilar conditions to equivalent transactions with other trading parties which places them at a competitive disadvantage and making conclusion of contracts subject to acceptance by the other parties of supplementary obligations which have no connection with the subject of such contracts. This is a non-exhaustive list of what art. 82 EC entails, there are other possible forms of conduct that would be caught. From the literal interpretation it is obvious that integration is a concern because of the stipulation that the conduct can affect trade between Member States. Other issues that stand out are concepts like fairness, tying, discrimination and consumer welfare. Art. 82 EC does not express a prohibition of uncompetitive structures or conduct that leads to them, nor does it prohibit existence or acquisition of market power. It expresses a restraint for a dominant firm to harm competition in various manners. The ECJ does not adhere to the literal interpretation and has consequently interpreted the notion of abuse to include conduct that may have an effect on the structure of the market.

3.3.3 Contextual (systematic) interpretation

Taking the preamble to the EEC treaty and the Spaak report into consideration a broader interpretation can be applied which emphasizes economic progress, continuous expansion, convergence of economic performance, harmonious development of economic activities and increased stability (sustainable and non-inflationary growth) in order to ensure enterprise growth.

---

140 Cattermole, E “The development and implications of collective dominance in EC Competition Law” (2000), Lund University, p 16
143 Cattermole, E “The development and implications of collective dominance in EC Competition Law” (2000), Lund University, p 16
144 Korah, V “An introductory guide to EC competition law and practice” (2000) Hart publishing, p 81
145 ibid. p 81
146 “Rapport des Chefs de Délégations aux Ministres des Affaires Etrangères” Secretariat of the Intergovernmental Conference, Brussels, 21/04/56
in a larger market.\textsuperscript{147} The preamble refers to other goals than efficiency which is the mantra in the US, other relevant factors include market integration, social policy (high employment and social protection, high quality of life), fair competition\textsuperscript{148}, respect of environment, the protection of small and medium sized companies, peace and liberty as well as solidarity among Member States.\textsuperscript{149} The mindset at the time of the Treaty creation heavily influenced these goals, a wider approach is taken than just economic although it was realized that economic targets were tools to be used to achieve the loftier goals of total integration.\textsuperscript{150} Both articles 81 and 82 EC should be read in light of the objectives of the Treaty, which are to be found in art. 2, 3 and 4 EC. The debate on how these goals conflict with each other is constant and is often the reason for why companies from other parts of the world are unsure of how to conduct themselves in the European market place.

3.3.4 Teleological interpretation

The teleological approach analyses effect, purpose and end result of the relevant laws. There is no explicit definition of competition in case law or in primary law. Mention of the “principle of freedom of competition” was made in Consten & Grundig\textsuperscript{151} in 1965 but that referred to the distinction between intra- and inter-brand competition. In this case it was made clear that competition law was not only about preventing anti-competitive behaviour but also to ensure the facilitation of an integrated single market, which requires no distortion of competition. During times of economic crisis like in the 70’s protectionism took center stage but since the Single European Act and the Treaty of the European Union market integration has taken center stage once again. The Commission reports on competition policy have provided help in this area and by studying the reports issued over the years it is easy to see the gradual change, from standard economic arguments in the early 70’s (stimulant of economic activity, efficiency improvement for the benefit of employment and consumers) to the inclusion of fairness in the late 70’s. In the early 80’s influence from the US and the Reagan years made the Commission focus more on properties of the market economy and allocation of the available resources to the most productive and efficient sectors. Workable competition was now the leading catchphrase. Later in the 80’s policy shifted towards free competition and fostering the spirit of entrepreneurs. In the early 90’s the connection between competition and economic efficiency was emphasized and the price mechanism was recognized as the most effective coordinator of the marketplace. In recent years the globalization phenomenon has brought about a discussion of a link between competition, innovation, productivity and competitiveness. Environmental concerns, promoting SME’s and fighting unemployment have lately been headline issues which have created conflicting views among the Member States as which goals should have overriding priority. To summarize the above it can be said that a balanced approach to competition is sought after. A balance between

\textsuperscript{147} Cattermole, E “The development and implications of collective dominance in EC Competition Law” (2000), Lund University, p 17
\textsuperscript{148} The exact meaning of the term is not clear, it has to be contrasted with efficiency, for example should courts intervene to help smaller but less efficient firms compete with larger and more efficient firms even if no abuse has taken place? Investment in the brand can be rendered useless in that case.
\textsuperscript{149} Craig, P & De Búrca, G “EU Law: text, cases and materials” (2003), Oxford University Press, third edition, p 936-937
\textsuperscript{150} Korah, V “An introductory guide to EC competition law and practice” (2000) Hart publishing, p 80
\textsuperscript{151} Consten SA and Grundig Verkaufs GmbH v EEC Commission, case 56 & 58/64 [1966] ECR p 299
free reign of the market forces and regulation to ensure that competition does not destroy itself in the end.\textsuperscript{152}

### 3.4 Chapter summary

The theoretical chapter started out with an outline of general economic concepts necessary to understand for the further discussion and predatory pricing in general. These concepts included market structure models like monopoly, oligopoly, monopolistic competition and free competition. A description of the most common cost measures followed where the benefits and pitfalls of each was discussed. Predatory pricing assessment theories are wide-ranging and responsible for the varying success rates at courts in the US and EU. The discussion brought up the different theories spanning from the no-rule approach to the structural test approach. The structural test requires study of industry structure and business strategy models like game theory are included as well as industry analysis models like Five Forces, Key Success Factors, competitor analysis, segmentation analysis and the industry life cycle evolution. Intra-firm analysis followed with a discussion on resources and capabilities, competitive advantage, strategic pricing and corporate strategy. The chapter ended with a description of the characteristics of competition from a business law perspective in the US and EU.

4 Empirical findings

In this empirical chapter the reader will be introduced to the predatory pricing and cross subsidization from a legal perspective from a US and EC perspective. Recent developments will also be addresses so that the analysis in the following chapter takes into account the very latest findings.

4.1 Concept of predatory pricing

Pricing at predatory levels means setting prices that are unreasonably low, either because they are below a measure of cost or because they generate an inadequate return. Low prices are beneficial for the consumer and are usually the result and aim of a free market and fair competition. Experience and economic theory reveal another aspect, predatory pricing can be an instrument of abuse. The offending party sets prices at unrealistically low levels in order to achieve longer-term objectives. The chain of events usually play out in the following sequence: the predatory company uses the low price strategy to deter a rival’s entry on the market or to drive him out of the market (sending a powerful signal that this won’t be a profitable market segment as they can use their dominance to sustain low prices, either by using their financial muscle or by cross subsidizing the product from another product segment), this results in the offender attaining a monopoly position which makes it possible to recoup its losses from the below-cost selling period and at the same time increasing profits by keeping prices on a high level. The irony is apparent; the benefit of the former lower price has turned into the opposite, hurting consumers, rivals and competition in general.153

4.2 Predatory pricing in different industries

Predatory pricing can occur when the market conditions are favourable, which means when the predator has a dominant position and there are high entry barriers making recoupment likely. This is amplified by the existence of a regulatory framework and a structure of the industry itself that support these conditions. This type of market structure exist mainly in deregulated industries, where it is common to find former monopolists still enjoying a dominant position with market power to match. This can be used to discourage entry of potential rivals.154 With the industries in the process of liberalization there is increasing risk of predatory action.155 Former state owned monopolies are not used to competition and will defend their dominance by using every conceivable business strategy, for example predatory pricing and cross-subsidies to keep prices artificially low to deter competitors from entering the deregulated market.

The airline industry is an example where new airline carriers are able to compete with incumbent dominant national carriers on their prime profitable routes previously restricted through regulatory control.\footnote{Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University, p 18} The arrival of low cost carriers have given the airline industry a real shake up, there is no possibility for the old national carriers to use predatory pricing as a strategy to force out or deter rivals from entering since prices set by the low cost no frills airlines are so low to begin with, they are more efficient than their bigger competitors because of factors like using same type of planes, only flying profitable routes and using internet booking systems etc. This shows that low prices are not immediately predatory, there are often underlying efficiency factors. Network industries in general provide opportunities for predators, which is evident in the telecom sector, where services require a network (essential facilities), which are costly to build from scratch. The software industry presents a third example. Software companies are able to give away products at next to zero prices because of the ease of replication and distribution (network economies of scale, the product being digitized and distributed over the Internet) in order to turn those products into the industry standard. Since digitization and distribution are easy to copy for all rivals, the important issue is to get first mover advantage. Another strategy used to great success by Microsoft is bundling the software with an existing popular product, by incorporating Internet Explorer with Windows, Microsoft was able to virtually eradicate Netscape from the Internet browser market. Losses are subsequently recouped once the standard is gained.\footnote{Niels, G & Ten Kate, A “Predatory pricing standards, is there a growing international consensus” (2000) The Antitrust Bulletin, vol 45, p 806 and Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University, p 18} The maritime shipping sector has had instances where establishing fighting ships proved a successful predatory pricing strategy by modifying freight tariffs in order to offer lower rates than the competitor for vessels sailing on the same route and date.\footnote{Niels, G & Ten Kate, A “Predatory pricing standards, is there a growing international consensus” (2000) The Antitrust Bulletin, vol 45, p 808} Given the distinct characteristics of each industry the inevitable question is, should there be industry specific test and rules? While this might seem reasonable in order to get as realistic analyses as possible potential problems include; an increasing workload and complexity for the courts to deal with and the blurring of industries, i.e. with the emergence of IT many industry barriers are fading and integration has occurred in others, for example telecom and computer related products.

4.3 Cross-subsidization

Cross-subsidization has become a frequently debated topic in recent years in the wake of deregulation. Public monopolies are accused of illegally using resources from the regulated market to stifle competition in un-regulated competitive markets. The definition of cross-subsidization is still vague which will have implications for the effectiveness of debate and for the possible strategic motives behind the business strategy, its various consequences for competition, and the measures to be taken against it.\footnote{The concept is similar to that of transfer pricing, a cost-allocation procedure practiced by multi-national firms operating in different jurisdictions, with the aim of minimizing taxation liability.} Defining cross-subsidization is not
easy. The Commission offered the following definition in its 1991 Guidelines for the Telecommunications Sector:

“Cross subsidization means that an undertaking allocates all or part of the costs of its activity in one product or geographic market to another product or geographic market”.

When cross-subsidy is suspected it can often be traced to one or both of two sources:
(a) the existence of costs common to more than one output (cost of resources that are used to produce different goods or services).
(b) the existence of monopoly power (exclusive rights to supply or benefits from monopolistic cost and demand configurations).

These are common features of the regulated sectors in most of the EU Member States. The phenomenon of cross-subsidization involves three elements, which are of relevance from a Community competition law perspective. (1) It concerns transfer of resources within an undertaking or group of undertakings. (2) It arises in monopoly power situations. (3) Common costs for several related product or geographic markets are involved. This usually happens when a firm owns the infrastructure or the network facilities used to supply both the reserved and the competitive markets, for example in telecom and the national carriers. When one product is cross-subsidizing another, it appears unprofitable to produce and is often mistakenly discontinued. When facility support (common) activity costs are allocated to individual product lines, they may appear unprofitable and are also often mistakenly discontinued. Illegal cross-subsidization can be fought by two sets of rules under primary EC law: Article 82 EC which is designed to prevent abuses of dominant position and in more limited circumstances the EC State aid rules (art. 87-89 EC).

Cross subsidization can occur within a regulated sector from one market segment to another, for example by charging a higher price in a highly populated area in order to offer remote areas adequate service. A second scenario is in circumstances where a competitive market finances a regulated market, for example duty shop in an airport offset costs in managing landing arrangements. The third scenario entails subsidizing a competitive market with resources from the regulated market where no competition exists. Finally subsidization can occur from one competitive market to another, often to gain early market dominance or capture from incumbents. The first two scenarios are not considered illegal as evident from the Commissions Guidelines for the Telecommunications Sector.

“cross-subsidization does not lead to predatory pricing and does not restrict competition when it is the costs of reserved activities which are subsidized by the revenue generated by other reserved activities since there is no competition possible as to these activities. This form of subsidization is even necessary as it enables the holder of exclusive rights to perform their obligations to provide a public service universally and on the same conditions to everybody…”

161 O.J. 1991, C-233/2
The third and fourth scenarios are more complex and need to be analyzed from an economic and business perspective before discussing the legal perspective. Because of the differences in cost allocation most economists agree on the difficulty in constructing uncontested benchmarks in order to determine if cross-subsidization has occurred. Three general approaches exist: Fully Distributed Cost (FDC), Incremental Cost (IC) and Stand Alone Cost (SAC) which all have their benefits and shortcomings. FDC involves the adoption of systematic procedures where all costs, including common costs are distributed to specific outputs, without detailed cost allocation data, cross-subsidies are impossible to detect. IC is the increase in cost linked with performing a “secondary” activity in addition to a “primary” activity. A secondary activity which covers its incremental costs does not receive a subsidy from the primary activity. The most important task is to establish which activity is primary and which is secondary since the primary activity must carry all the common costs. If an activity designated as primary is monopolized, a multi-product firm can establish a beneficial market position in a neighbouring market, even if it is highly competitive. SAC determines the hypothetical cost of producing each output separated from other outputs and connecting these to the prices charged for the outputs. The main pitfall with SAC is that the incumbent firm has superior knowledge about its costs in relation to regulators and new entrants. Recent economic literature favours a game theoretical approach to the issue. Baumol and Willig (1982) have developed standard rules for cost allocation for determining prices set by regulated firms, which can be summarized as follows. Prices will be free of subsidies if no consumers pay more than the stand-alone cost of serving them while all consumer groups pay at least the incremental costs of serving them. The difference is known as the core, and if prices lie within the core they are subsidy-free. Critics of this approach mean that it assumes that regulated firms make no long-term excess profits which is very rare in reality. Another problem is the assumption that prices for all outputs are regulated which is not true in a partially liberalized market where companies are free to charge its own prices for certain outputs.\(^{163}\)

In order to understand the strategic decisions of cross-subsidization portfolio analysis can be of assistance, for example using the GE/McKinsey Matrix. Another useful tool is the BCG’s (Boston Consulting Group) Growth-Share Matrix. Like the GE/McKinsey matrix it uses industry attractiveness and competitive position as measures but it only uses a single variable for each axis. Industry attractiveness is measured by market growth rate and competitive position by relative market share (in relation to largest competitor). The four quadrants of the matrix predict cash flow patterns and offer strategy recommendations summarized in figure 4.3. Although an elementary model it can provide useful insight as a first analysis determining how a firm allocates resources between different products and segments. The model is versatile and can be used for analysis of brands, distribution channels and customers. Its weakness lies in the over simplification of factors that determine industry attractiveness and competitive advantage, the variables used are not always good indicators of what they intend to measure. They also require a thorough definition of the relevant market so that market share is not exaggerated in either direction. It is natural, from a strategic viewpoint to cross-subsidize the question mark from the

cow to make the question mark into a star and expand the business. Should this be considered unlawful?¹⁶⁴

![The Growth-Share Matrix](image)

**Figure 4.3: BCG Growth-Share Matrix** (Grant, R (2002) “Contemporary strategy analysis” Blackwell, p 482-483)

### 4.3.1 Legal framework in the cross-subsidization field

Cross-subsidization can be controlled under national regulatory rules and Community. The legal standards under these different legal regimes are not the same, in some cases regulatory intervention goes further and imposes stricter standards than competition rules. The legality of cross-subsidies falls under Article 82 EC, in some cases the State aid rules apply (Art. 87-89 EC). In order to for Article 82 EC to apply, dominance on the relevant market must be established, and abuse determined. If the company or organization in question is State-owned or controlled, internal transfers of resources are assessed under the State aid rules. The application of the State aid rules depends on all the conditions of Article 87(1) EC being satisfied (the aid must originate by or through State resources, must benefit a particular undertaking or the production of certain goods or services in a way which distorts competition, and inter-state trade must be affected). In contrast to Article 82 EC dominance is not a requirement. The state aid perspective lies outside the scope of this thesis and will not be discussed further.

The Commission has also dealt with cross-subsidization problems in a number of strategic alliance cases under Article 81 EC, with the aim of preventing future cross-subsidization between, for example, the parents of a joint venture company and their subsidiary. The Commission also examines cross-subsidization issues in the context of notifications under the Merger Regulation, often dealing with vertical integration issues. In the majority of cases Article

82 EC will be the primary tool of use. In a cross-subsidization scenario, a dominant position exists in at least one market (the monopoly market). The dominant undertaking’s abusive behaviour (cross-subsidization) effects the secondary (or adjacent) market where the undertaking is not necessarily dominant but reinforces its position. It is accepted law that Article 82 EC can apply to situations where there is a dominant position in one market, but the abuse is committed in a separate but related market. Some kinds of cross-subsidization are normal business practice, justifiable as part of a strategy for acquiring a foothold in a new market or to protect existing market share. The ECJ has however at other times cracked down on the business practice because it reduced competition. Despite the courts vigilance it is unlikely that cross-subsidization be considered an abuse in itself. Article 82 does not prevent companies from competing on the merits or from entering new markets. Using common outputs is sometimes an unavoidable outcome of such acts. Cross-subsidization can be considered abusive behaviour when it comes in the form of excessive pricing in one market where dominance is in effect. The use of cross-subsidization is considered predatory behaviour and most often comes in the form of predatory pricing.

4.3.2 Cross-subsidization as part of the predatory concept

As discussed above the main problem with cross-subsidization is the issue of common costs. Costs common to different lines of production makes the determination of total cost of different outputs arbitrary and difficult. Prices below average variable cost are generally seen as predatory. Applying structural and recoupment considerations will not make a huge impact when it comes to cross-subsidization as barriers to entry (regulatory, financial, etc.) may be high, especially in the utilities sectors and therefore the recoupment scenario is realistic. Companies that are in a dominant and sometimes monopolistic market also have more information than rivals and can therefore exploit this information asymmetry when it comes to cost analysis and pricing strategies. The problem is that most cases of suspected cross-subsidization show prices above average variable cost which makes it difficult to prove illicit intent in the light of the problems with common cost and how this affects the total cost calculations. Prices below average total cost (but above average variable cost) are not always anti-competitive. They become anti-competitive when they can hurt an efficient competitor forcing it to leave the market, to deter entry or when they reduce the intensity of competition. Even if the intent to eliminate competitors doesn’t exist the pricing policy can have the same effect. Relevant factors to consider when deciding what behaviour to punish are if the rival is efficient or if the price difference can be traced to the alleged predator being more cost efficient, the prices have to be considerably lower and the plaintiff should incur losses because of the policy of the incumbent. Because of the problem with total cost in the cross-subsidization area a better way to deal with the issue is by using stand-alone costs, the total cost that a new entrant incurs in order to provide a similar product or service in an efficient manner. If the incumbent still has lower cost structures and prices it means that the rival is less efficient. Article 82 EC obliges dominant firms to avoid predation and to refrain from discriminatory pricing policies between customers, at least when these customers are in competition among themselves. Predation and discrimination are independent concepts, they can

---

167 The ECJ has been clear: “It must be possible to penalize predatory pricing whenever there is a risk that competitors will be eliminated” (Case C-333/94 P, Tetra Pak II, note 15, para 44).
occur without the other being applied. Because there is no direct link between the two the issue
will not be further discussed, although it needs to be said that when it comes to cross-
subsidization the aspect of discrimination is very much a relevant issue, especially in the utilities
sector where national state owned companies can give favourable prices to domestic companies
who are direct rivals with companies from abroad. Selective price cutting was in Tetra Pak II
deemed unlawful when prices were predatory, in terms of discrimination the court said that it was
allowed to set prices at a level to “meet” competition (match their offers) but not to “beat”
competition\textsuperscript{168}, i.e. force them out of the market.\textsuperscript{169}

Several types of definitions of cross-subsidization exist with some being more general and others
more restrictive. The difference from general to restrictive is large and has important implications
for the strategic nature of cross-subsidization and its consequences for competition.\textsuperscript{170}

The cost transfer definition
This general definition of cross-subsidization implies that some or all of the costs pertaining to
one product are transferred to another product. It does not include the revenue side and doesn’t
require that the subsidized product is loss making. This wide definition includes predatory
behavior in the sense that the subsidizing company could set price below actual unit cost and as a
consequence damage competition. Non-predatory situations where the subsidizing company
increases its profit by maintaining prices in non-reserved markets and then transferring costs from
these to a reserved market where the cost increase would be matched by increases in regulated
prices are also envisioned.

The temporary loss definition
The temporary nature of the loss is implied when establishing new lines of business, providing
the means for predatory pricing. A period of net outflow of resources is expected to be more than
recovered in the future. In this case, cross-subsidization becomes a source of funding for
predatory pricing. Three conditions need to be present; predation must be profitable, the strategy
must involve negative cash flows for the predator and the predator must have limited cash or
other liquid assets with which to finance the losses.

The permanent loss definition
A more long-term perspective is expressed by this definition which states that the subsidized
product must be a permanent loss-maker financed via profits from other products. A necessary
condition is that the subsidized product has a negative net present value. This implies that firms
have to deviate from the maximum efficiency policy found in most companies and therefore
implies that cross-subsidization is a questionable strategy, at least for private firms. Public or
state controlled firms or private firms with non-profit motives (to promote a desired image, most
often to promote local causes or welfare) can use it, for example for financing unprofitable but
necessary services like bus routes in remote locations.

\textsuperscript{168} The CFI refers to the elimination of “competitors”, without making a distinction between efficient and inefficient
ones (Case T-83/91, Tetra Pak II, note 35, para 202).
\textsuperscript{169} Hancher, L & Buendia Sierra, J-L “Cross-subsidization and EC Law”, \textit{Common Market Law Review}, Aug 1998,
page 18-27 in article
\textsuperscript{170} Fjell, K “A cross-subsidy classification framework”, (2000), Working paper for the Foundation for Research in
Economics and Business Administration, and The Norwegian School of Economics and Business Administration, p
2-5.
A cross-subsidy classification framework based on effects on competition and type of motivation is presented in Table 4.3.2.¹⁷¹

<table>
<thead>
<tr>
<th>Conduct</th>
<th>Profit motivated</th>
<th>Non-profit motivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predatory</td>
<td>Predatory pricing financed through a cross-subsidy.</td>
<td>E.g. public enterprise management motivated by large scale of operations.</td>
</tr>
<tr>
<td>Non-predatory</td>
<td>E.g. investment into new product line which will not reduce competition financed through X-subsidy.</td>
<td>E.g. inefficient operation (“quiet life”) in competitive market financed through X-subsidy from protected market.</td>
</tr>
</tbody>
</table>

Table 4.3.2: Cross-subsidy classification framework

The first type, predatory and profit motivated is the most contentious form and the focus of this thesis. The goal of the firm is to drive out competitors and monopolize the market through predatory pricing, funded by cross-subsidization. Consumers gain from low prices in the beginning but can suffer in the long run when the company becomes dominant and even monopolistic and can set prices at its own behest.

The next type, predatory and non-profit motivated is most relevant for public firms as these are more likely to have non-profit motives. It can be quite damaging, not only to competitors, but also to consumers by reducing the range and possibly also the quality of services.

Non-predatory and non-profit motivated cross-subsidization is also undesirable from a social perspective (internal inefficiency and raised price level in regulated market stemming from transferred cost from competitive market where it might not be as efficient as rivals), it does not have a negative effect on competition.

Finally, non-predatory and profit motivated cross-subsidization has positive welfare effects. For example, a traditional, profit motivated investment into a new product line that results in more competition and increased choice for consumers.

4.4 Relevant legislation

On both sides of the Atlantic predatory pricing falls under the competence of the competition authorities. In the EU it is regulated both at a Community level and every Member State has their own competition authorities to handle purely domestic allegations. In the US antitrust legislation is regulated on federal and state level which is quite similar to the EU system. This thesis will focus on legislation on a Community level in the EU and at federal level in the US.172

4.4.1 EC legislation

When dealing with allegations of predatory pricing, art. 82 of the EC Treaty173 is the relevant provision which prohibits a company conducting itself in a manner that abuses its dominant position within the Community and which may affect trade between Member States.174 This particular piece of legislation was also chosen because it encompasses the concepts central to predatory pricing analysis, namely dominance and market power, relevant markets and abuse of structure and behaviour which from a firm perspective can be seen as a justified business strategy. Article 82 includes a non-exhaustive list of examples, two of which can be applied against predatory pricing conduct. Art. 82 (a) prohibit unfair pricing and trading conditions (for example below cost prices at an unreasonably low level), while Art. 82 (c) concerns price discrimination (selective price cutting in different markets which is not the focus of this thesis because of the added dimension of discrimination which would be even harder to prove given the myriad of factors that can influence prices in different situations). Art. 81 EC contains the same list of abuses but is relevant only when two or more companies are involved in the offence. The article also states that a decision that may appear contrary to art. 81(1) may be lawful if it improves production, promotes economic progress and gives consumers a fair share of the benefit (81(2)) and at the same time doesn’t eliminate competition and conforms to the reasonable test (81(3)). This exception possibility does not exist under art. 82 EC, abuse is abuse and is never sanctioned. The Commission is responsible for enforcing antitrust laws and the courts meet out judgments. National competition authorities retain their right of intervention when the abuse takes place solely within the relevant Member State. The Commission has extra-territorial competence which means that it can bring a firm established outside the Union before the courts if the abuse takes place within the common market on a substantial level.175

4.4.1.1 Dominant position

Predatory pricing can be described as an abusive exploitation of a dominant position. Why does there need to be dominance for a pricing strategy to be categorized as predatory? The simple answer is that it wouldn’t make sense for a non-dominant firm, implying that this firm is small and can’t handle the costly strategy, which requires deep pockets. The competition would in all likelihood remain strong and the firm would not be able to recoup its losses. The ECJ definition

172 For an overview on national legislation in the field of predatory pricing in OECD countries see OECD publications, “Predatory Pricing”, p 29-75, Paris, 1989
174 Predatory conduct by multiple firms working in unison can fall under Art. 81. As the pricing scheme under cartel predation and single firm predation is rather similar, only Art. 82 shall be discussed here on after. A cartel agreement on predatory conduct would clearly fall within the per se prohibition of Art. 81.
on dominant position was established in Continental Can176 where the economist view of a dominant position was applied, this meant a firm was dominant if it could act independently from its competitors, purchasers and suppliers and was able control the pricing structure. This view has been altered by subsequent case law and the present definition was reached in the United Brands177 case which has a more legal view to dominance. Here the Court emphasizes economic strength, relevant market and the power to behave independently to an appreciable extent. Power over price was not as relevant any longer as United Brands were considered dominant despite suffering losses. Analyzing the relevant product and geographic market is standard operating procedure when determining dominance where the focus is on the demand and supply structure of the market, for example by investigating the existence of possible substitutes, interchangeability of products (a firm cannot sustain a monopoly without barriers to entry on both the supply and demand side). On the demand side the cross-elasticity of the product needs to be investigated. High cross-elasticity exist when a price increase leads consumers to switch to an alternative product, from beef to lamb for example. If the cross-elasticity is high it means that the product are part of the same market. Price is not the only relevant factor to consider, physical characteristics, reputation and quality are also important. On the supply side the Commission investigates if firms producing differing products can change their machinery to produce goods similar to that of a rival.178 This specified analysis was insisted upon by the ECJ in Continental Can since they felt that the Commission had neglected to analyze the different market in detail. The problem is determining how wide or narrow definition to use as this has the potential to make the company big or small on the market. In United Brands the ECJ used a narrow approach when defining bananas as unique without any substitutes in a particular market segment, the old and the infants. To aid companies and Courts the Commission has released a notice on the definition of the relevant market where market share and other specifics like barriers to entry are included.179 The hypothetical monopolist test (SSNIP)180 which discusses the monopolists’ power over price is also used by the Commission when analysing how substitutes are adopted when prices are raised. It is used for both product market and geographic market (substantial part of the common market, transport costs are also considered when analyzing geographic market) definitions.

The Commission also considers evidence of substitution in the past, views of customers and competitors, quantitative econometric tests and consumer preferences.181 Unlike US legislation which specifies a time frame for the switching of products (1 to 2 years) the Commission has not chosen to define a time frame.182 Using a business strategy perspective it is apparent that

180 SSNIP stands for “small but significant and non-transitory increase in prices”, developed in the US. A relevant market is the narrowest range of products that a hypothetical monopolist would find possible and worthwhile to institute an SSNIP. If demand substitution was high enough to make the price increase unprofitable because of the ensuing loss of sales, then additional product substitutes would be included in the relevant market. See: Craig, P & De Búrca, G “EU Law: text, cases and materials” (2003), Oxford University Press, third edition, p 1001
switching products implies costs related to learning curve effects and network externalities constituting barriers of entry and therefore it is not enough to analyze the situation from merely an economic perspective. Dominance implies high market share and the ECJ has ruled in cases like *Akzo* \(^{183}\) that a market share around 50% is indicative of dominance even if they have found dominance with lower percentage rate, additional factors like entry barriers are important to consider for a wider view of the situation. Barriers to entry should be categorized as artificial and natural, the natural having more to do with efficiency and experience and artificial more to do with obstructing new entrants. The following factors have been considered as indicative of market power but there is no clear consensus if they are a result of efficiency or used to keep out new rivals, it has to be decided on case-by-case basis; economies of scale, capital markets access, vertical integration, superior technology and technical know-how and legal provisions. \(^{184}\) Dominance or near monopoly market share are not illegal per se although companies in such a situation have a special responsibility to ensure that competitors are not eliminated. The simple answer to the question if dominance is needed is deceptive as a non-dominant firm can be a very large company that recently has entered a new market and therefore has a small market share as the Court was aware of when ruling in the *Akzo* case. This firm can use its resources from other profitable market segments (cash cows) to cross subsidize their activities (which are often below cost pricing) in the new market. This cross subsidization strategy is used for a extended time period to outlast less financially empowered competitors and eventually force them out or lessen their market share, the end goal often being to gain monopoly power and dictate prices. Predatory pricing can also be used to deter rivals competing in adjacent markets or expanding operations to previously uncontested market segments where the predator chiefly operates. \(^{185}\)

4.4.1.2 Abuse

Art. 82 identifies several examples of conduct that are abusive, but for a definition of abuse the case *Vitamins* \(^{186}\) provides a guideline established by the ECJ.

“...The concept of abuse is an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those which condition normal competition in products or services on the basis of commercial operators has the effect of hindering the maintenance of the degree of competition still existing on the market or the growth of that competition.”

To understand this definition it is necessary to keep in mind the aim of competition law in the EC Treaty as discussed earlier, for example workable competition. The proportionality principle applies as a main criterion for abuse. Any reduction of competition is seen as unfavourable as was evident in the *Vitamins* case where even a small reduction of competition was infringing art. 82 EC. \(^{187}\) In the case of predatory pricing, abuse can be found in the condemned pricing behaviour, listed under art. 82(a) unreasonably low prices, art. 82(c) price discrimination.


\(^{184}\) Craig, P & De Búrca, G “EU Law: text, cases and materials” (2003), Oxford University Press, third edition, p 1005

\(^{185}\) Newton, C “Do Predatory need to be Dominant?” (1999) *European Competition Law Review*, 127, p 131

\(^{186}\) Hoffman-La Roche & Co. AG v Commission, case 85/76 [1979] ECR 461, para. 91

\(^{187}\) Hoffman-La Roche & Co. AG v Commission, case 85/76 [1979] ECR 461, para. 123
Predatory pricing can be both exclusionary and exploitative. The former occurs when a company’s performance is indicative of harming the competitive position of rivals or to drive them out of the market. The latter implies using the company’s market power to harm those who it deals with. In the first phase of the predatory behaviour, the predator excludes its prey from the market (here the customer enjoys low prices). In the second phase, the predator raises its prices by using its monopoly power; this constitutes exploitative behaviour.

4.4.2 US legislation
This section will focus on relevant federal provisions and not local and state level. There are three important laws enacted at different times and not as a unit. Because of the considerable overlap they must be seen as a body of law, the essence of each is the same. The Clayton Act has a more specific approach to the issue than the Sherman Act and Federal Trade Commission Act, which are more general. The following pieces of legislation were selected on the basis of research (cross-referencing the literature) and case analysis, which revealed that these Acts were the most relevant for the predatory pricing field in the US. They also allow for easy comparative analysis with relevant EC legislation as they entail the same relevant concept linked to predatory pricing, i.e. market structure and dominance, relevant market, firm behaviour, recoupment and a list of examples of abusive conduct.

4.4.2.1 Sherman Act
Section 2 of the Sherman Act condemns monopolisation and attempts of monopolisation concerning any part of commerce among US States. Being in control of a monopoly situation is not prohibited but the improper acquisition of it is unlawful. The offence involves two elements, the first being the establishment of monopoly power by the alleged predator in the relevant market and second, the willful acquisition of power distinguished from growth achieved by having a superior product, business acumen or historic accident. Proof of the first element requires definitions of the relevant geographic and product markets, and proof of monopoly power within those markets, i.e., power to control price or exclude competition. The second element focuses on the monopolist’s conduct, competing aggressively on the merits is encouraged but the firm must not use its monopoly power to harm competition by excluding rivals. Courts must however look beyond the exclusionary effect since this may arise from pro-competitive or anticompetitive behaviour and also consider the impact on competition and consumer welfare. If pricing strategies are intended to promote competition on the merits, courts tend to find them lawful despite any exclusionary effect.

---

191 United States Code Annotated Title 15: Commerce and Trade, Sections 1-7; 12-27, (1973)
An attempt to monopolize, which violates Section 2 of the Sherman Act, requires three basic elements: (1) exclusionary or anticompetitive conduct; (2) specific intent to control prices or destroy competition; and (3) a dangerous probability of success. The Federal Trade Commission has stated that “the legal and economic standard for evaluating allegedly predatory or discriminatory conduct should distinguish the structural conditions and behavioural patterns that are likely to improve competitive performance from those that are likely to injure competition.” and offered three criteria to assist in the assessment; “(1) whether firms without substantial market power would find the conduct at issue to be profitable or economically rational; (2) whether the conduct improves product performance; and (3) whether industry conditions such as high entry barriers are likely to mitigate or accentuate any anticompetitive effects of the conduct. When properly defined predatory pricing satisfies these criteria. 194

The specific intent element is a vital aspect concerning the offence of attempted monopolization. As it is hard to prove using direct evidence it is necessary to examine a defendant’s conduct to determine if there is intent to drive competitors from the market and if the action taken is predatory (no rational business justification) or competitive. The offence of attempted monopolization violating Section 2 of the Sherman Act requires a “dangerous probability” that the conduct will result in a monopoly. The courts addresses if the predator has the potential to succeed in its effort and subsequently threaten consumer welfare. Market share analysis is usually the starting point of this investigation, most courts have concluded that a market share of less than 40 to 60 per cent is too small to create the requisite “dangerous probability of success.” The FTC and the courts have stated that the assessment of “dangerous probability” does not focus solely or primarily on market share. Other factors include, the absolute and relative market shares of competing firms; the strength and capacity of current competitors; the potential for entry; the historic intensity of competition; and the impact of the legal or natural environment. 195

4.4.2.2 Federal Trade Commission Act
The Department of Justice and the Federal Trade Commission are responsible for governmental enforcement of the antitrust laws. It is broad in the sense that it prohibits general business behaviour that has a direct impact on the consuming public. In case of violations of the Sherman or Clayton Acts the Department of Justice can seek injunctions, fines and criminal sanctions. Section 5 of the Federal Trade Commission Act declares “unfair methods of competition” unlawful and lets the Commission seek injunctions or issue cease and desist orders for violations of the Sherman or Clayton Acts. The Federal Trade Commission can challenge predatory pricing as a separate offence under Section 5, apart from the Sherman or Clayton Acts. As the offences under this Act are similar to those found in the Sherman and Clayton Acts, the details will be left untouched.

4.4.2.3 Clayton Act
Section 2 (a) of the Clayton Act categorizes price discrimination as unlawful in situations when competition is substantially reduced, harmed or prevented and a monopoly is created. Particularly

196 United States Code Annotated Title 15: Commerce and Trade, Sections 41-58, (1973)
198 As amended by the Robinson-Patman Act, which both detailed and broadened the provisions, see United States Code Annotated Title 15: Commerce and Trade, Sections 12-27, (1973)
primary line discrimination, i.e. local price cutting and equivalent practices, used to harm rivals is considered predatory. Discrimination in price between two buyers of the same seller, of commodities of like grade and quality is prohibited if the discrimination substantially harms competition in any line of commerce. Specific circumstances like meeting prices offered by competitors, sales of perishable or obsolete good are legal. Primary line discrimination under the Clayton Act has been interpreted more harmoniously with predatory pricing under the Sherman Act. The offence of attempted monopolization under the Sherman Act requires proof of a dangerous probability and that the price-cutting will result in monopoly, the Robinson-Patman Act only requires proof the conduct “may substantially lessen competition.” This distinction can be explained by the fact that the Robinson-Patman Act was created to protect competitors and the Sherman Act to protect competition.  

4.5 Case law

There exists a large amount of economic literature on predatory pricing and considerable case law in the US but case law is more limited at the EC level. This means that the CFI and ECJ have relatively few judgments to base conclusions on, conceivably letting them borrow traits from the rich experience US authorities have with the matter. As the following case analysis will reveal the CFI and ECJ have established its own approach towards predatory pricing within the last two decades. The discussion will center on important cases in the EU and the US and also include more recent cases.

4.5.1 EC Case law

EC competition law has a predominately cost-based approach to predation. The doctrine concerning predation in EC Law was first established by the ECJ in the Akzo case, and then confirmed in Tetra Pak II. The Akzo doctrine, states that it is contrary to Article 82 EC for an undertaking dominant in one market to use this market power so it can offer predatory prices in another market. This even if the undertaking is not dominant in the second market. According to the same doctrine prices are considered “predatory” and contrary to Article 82 EC if they are at a level below average variable cost. Prices at a level below average total cost (but above average variable cost) are contrary to Article 82 EC if they are at a level below average variable cost.

---


200 As mentioned in the delimitations section this thesis focuses on cases on the federal level in the US and at Community level in the EU. This delimitation has consequences for the amount and type of cases that are included in the thesis. In the US there are a number of cases which deal with predatory pricing at a federal level, since the Brooke Decision there have been no further cases. Therefore to show the development in the US other sources had to be considered. Previous research and email interviews confirmed this limitation and gave the author suggestions for recent developments. In the EU the very latest development have been included and build on the existing cases that were suggested by previous research and email interviewees.

201 The choice of the discussed cases in section 4.5.1 to 4.6.2.2 was based on previous research as done by Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University, p 26-35 and OECD publications, “Predatory Pricing”, p 70-73 Paris, 1989 as well as suggestions from email interviews performed for this thesis. The contribution of this thesis is a deeper analysis of the cases than performed by previous research as well as the inclusion of new cases and decisions like Wanadoo, British Airways and Michelin II.


Prices above average total cost are considered legal. The ECJ’s approach has been influenced by the US courts cost based approach but differ when it comes to the structural requirements like the possibility to recoup losses as was evident in both Akzo and Tetra Pak II. In later cases like Compagnie Maritime Belge the Court has left open the possibility of adopting the US definition in future cases. The following cases were selected on the basis of past research and suggestions by interviewed persons. Past issues of the annual competition policy review and the competition policy newsletter helped select the relevant cases as it these publications divide antitrust cases into different topics according to the examples in art. 82 EC. The reason for their inclusion in the thesis rest on their connection to predatory pricing or linked concepts. The case were also selected on the basis of cross-referencing, the Courts refer to old similar cases when ruling in newer ones.

4.5.1.1 Akzo
In its AKZO decision, the ECJ addressed predatory pricing for the first time. AKZO was a Dutch producer holding approximately 50% of the organic peroxide market in Europe, and was alleged to engage in systematic below-cost pricing, selective price cuts and threats in order to prevent ECS, a small rival operating in the English market of flour additives from expanding in the related plastics sub-market, including the organic peroxide market. AKZO threatened ECS to drive them out of the flour additives market and offered large discounts to ECS’ customers while keeping normal prices to other customers. ECS reported the behaviour to the Commission claiming it was an infringement of art. 86 (now art. 82) EC Treaty, which found that AKZO had abused its dominant position by offering below-cost prices. The Commission's treatment of AKZO's overall strategy was important because of the standards it created. AKZO defense was that its pricing policy satisfied the Areeda-Turner test but the Commission unequivocally rejected the Areeda-Turner test, which legalizes prices above average variable costs. The Commission stated:

“The standard proposed by AKZO based on a static and short-term conception of efficiency takes no account of the broad objectives of EEC competition rules set out in Article 3(f) and particularly the need to guard against the impairment of an effective structure of competition in the common market. It also fails to take account of the longer-term strategic considerations which may underlie sustained price cutting and which are particularly apparent in the present case. Further it ignores the fundamental importance of the element of discrimination in seeming to permit a dominant manufacturer to recover its full costs from its regular customers while tempting a rival's customers at lower prices. Yet even if the underlying policy considerations of Articles 85 and 86 were limited (as AKZO argues) to the achievement of short-term efficiency, it is not only the 'less efficient' firms which will be harmed if a dominant firm sells below its total cost but above variable cost. If prices are taken to a level where a business does not cover its total costs, smaller but possibly more efficient firms will eventually be eliminated and the larger firm with the greater economic resources including the possibility of cross-subsidization will survive.”

208 ECS/AKZO, 28 OJ European Communities (No. L 374) 1(1985), p 20

The Commission also stated that pricing above full costs could be anticompetitive:

“The important element is the rival’s assessment of the aggressor’s determination to frustrate its expectations, for example as to its rate of growth or attainable profit margins, rather than whether or not the dominant firm covers its own costs. There can thus be an anti-competitive aspect in price cutting whether or not the aggressor sets its prices above or below its own costs.”209

The reasonableness and underlying purpose of the pricing conduct is used in the test. If the purpose is to eliminate a competitor or to restrict competition, an infringement of Article 82 EC is established. The Commission recognizes that even dominant firms can legitimately seek to prevail over rivals, provided that it competes by having greater efficiency and superior performance.210

The ECJ employed a cost based test and referred to intent (strategic behaviour) as an additional element of the predation test, (a two-tier test). The ECJ concluded that prices below AVC almost certainly are predatory and abusive, since a firm has no other interest in setting such low prices but to eliminate a rival and gain a monopoly. Prices set above AVC but below ATC are to be considered predatory only if they are part of a plan to eliminate competition.211 Intent is not relevant unless it can be shown in practice through systematic exclusionary behaviour.212 It is clear from the statement made by the Court that predation can occur only when there is a chance of recouping losses, it is also clear that there is a stricter test when prices are between AVC and ATC which can benefit sophisticated business strategies employed by larger firms since they rarely detail a specific plan of eliminating competition. Using variable costs is troublesome when economies of scope is considered and a longer time frame is used. Excess capacity can produce problems when determining the historical costs, obsolete products are often sold at low prices even if they are not profitable per unit. By using opportunity cost (value of a product is less than paid for it) the historical cost problem could be resolved. AVC is also industry specific, the cost of taking on another passenger on a plane is next to zero.213 The ECJ left open the possibility for other tests to be applied in other cases if the market situation requires it. The cost based test was appropriate to the specific circumstances in this case.214 Interesting to note is that the Advocate General opinion was that the Commission’s decision was to be overturned as AKZO’s proof of conduct was inconclusive.215

209 ECS/AKZO, 28 OJ European Communities (No. L 374) 1(1985), p 20-21
4.5.1.2 Tetra Pak II

In the Tetra Pak II decision from 1997, the ECJ elaborated on the principles laid down in AKZO. The case was raised by Tetra Pak International SA against the judgment, T-83/91 of the Court of First Instance. In the judgment T-83/91 the CFI dismissed Tetra Pak’s request to annul Commission Decision 92/163/EEC, related to the abuse of a dominant position under art. 86 (now art. 82 EC). Originally the case was brought to the Commission by Tetra Pak’s competitor Elopak. The dispute concerned the liquid and semi-liquid food packaging sector, like milk and dairy, juice, wine, water, sauces, baby food etc. The dominant product for this packaging form was milk, which could be sold fresh or under aseptic conditions (UHT milk). It was found that Tetra Pak had 90 % - 95 % market holding, quasi-monopolistic, in the aseptic sector (cartons and machines) and its only real competitor, PKL, had the remaining market share of 5 % - 10 %. In the non-aseptic sector (cartons and machines) the market structure was oligopolistic. At the time of the decision, Tetra Pak had a 50 %- 55 % market share. Elopak, the main competitor, had a market share of 27 % in the year of 1985 in non-aseptic machines and cartons, and PKL had approximately 11 % of that particular market. On both carton and machine markets there were some small companies and manufacturers, but no serious competitors. For technical reasons and because manufacturers of aseptic machines often supply cartons to be used in their machines, possession of aseptic technology is vital for market entry both for machines and aseptic cartons. Elopak Italia complained to the Commission about Tetra Pak Italiana and its associate companies in Italy. It accused Tetra Pak of engaging in trading practices, which were abusive within the meaning of Article 86 EC. Elopak claimed that Tetra Pak sold cartons at predatory prices, imposed unfair conditions on the supply of machines for filling those cartons, and in some cases, sold the filling equipment at predatory prices.

In the Commission’s decision it was stated that the marketing policy of Tetra Pak aimed at restricting supply and compartmentalizing the national markets within the Community, with the numerous contractual clauses Tetra Pak tried to bind the customers to it and thus, trying to eliminate potential competition. Also the pricing policy of Tetra Pak was found out to discriminate between customers in different Member States, and at least in Italy, also to eliminate competitors.

The ECJ found that Tetra Pak engaged in predatory pricing on a market in which it was not dominant. This begs the question how to establish a link between a dominant position in one market and the abuse in another. Art. 82 EC gives no guidance in this matter. The ECJ found a link between the markets in this case and that this reinforced Tetra Pak’s economic power in the market where the abuse took place. This conclusion would mean that a firm dominant in one market has special responsibilities to behave in a proper way on markets where links are present, which is in line with the ECJ’s decision in Michelin. The ECJ rejected Tetra Pak’s argument that it did not have reasonable prospects to recoup losses as a result of a predatory

---

218 Non-aseptic packaging is for the packaging of fresh products (www.frg.eur.nl/rile/emle/Theses/bjork.pdf, 28.11.2003)
221 Nederlandsche Banden-Industrie Michelin v Commission, case 322/81 [1983], ECR 3461, p 3511
pricing strategy in the market in which it was not dominant. The Commission did not have to prove that the predator would be able to raise prices following the elimination of the rival. This argument goes against decisions in the US, where recoupment is a vital element in predatory pricing analysis. ECJ position was that such an additional prerequisite was not established in the AKZO decision although recoupment is the eventual object of a predatory pricing scheme it must be possible to penalize predatory pricing whenever there is a risk that competitors will be eliminated. The AG in the TP case felt that this prerequisite wouldn’t be advisable for a number of reasons; selling at loss in order to eliminate competitor would be suicidal if there was no prospect of recouping losses, the economic potential of the dominant company and the weakening of competition on the relevant market will in principle ensure recoupment of losses, it is hard to define and prove and finally predatory pricing is in itself anticompetitive. ECJ held that a recoupment requirement would not be advisable in the circumstances of the present case. 222

This indicates the ECJ’s flexibility to include the recoupment test on a case-by-case basis. Without regard to the relevant economic circumstances, Tetra Pak makes it hard to distinguish fair from unfair competition and deprives dominant undertakings of legitimate, competitive instruments to the detriment of consumers. 223 Regarding the cost measure of predatory pricing the ECJ followed its doctrine set out in Akzo (prices below AVC are predatory). 224

4.5.1.3 Irish sugar

In 1997, the Commission’s investigation of British Sugar found that the company abused its legal monopoly for producing sugar in the UK. 225 The investigation dealt with predatory pricing, specifically the issue of selective pricing. The company had a legal monopoly for sugar production in the UK, selling sugar for both industrial and retail use. It priced Napier Sugar, one of its customers, at a level that prevented Napier to operate and compete profitably with British Sugar at the retail level. To exacerbate the situation retail prices were low enough to prevent imports from outside the UK. In the end Napier Sugar was forced out of the retail sugar market as a result of British Sugar’s actions. Although the prices were below ATC the Commission found abuse of art. 82 EC because of the discriminatory nature of selective pricing, they relied on the principles established in the Michelin case 226 that a company in a dominant position has a special responsibility not to further diminish the degree of competition remaining on the market. The Commission also made a reference to AKZO condemning selective, discriminatory pricing where some customers were charged prices above ATC and others were charged prices below ATC. This demonstrates predatory intent. 227 The Irish Sugar case 228 from the CFI dealt with the same issues and action was brought by the Commission but the CFI did not grant the entire decision, there was only partial success as the CFI concluded that the Commission had not proven that the rebates and other forms of selective price cutting were used to harm competition. The

225 (Case IV/34.621) O.J. 1997 L258/1.
226 Nederlandsche Banden-Industrie Michelin v Commission, case 322/81 [1983], ECR 3461, p 3511
228 Irish Sugar plc v Commission of the European Communities, case T-228/97 [1999] European Court reports 1999 Page II-02969
Commission prevailed on the fact that Irish Sugar and a subsidiary, SDL were in a joint dominant position, the CFI also confirmed previous case law definitions of important concepts like abuse, market share and dominance and the special responsibility of being in a dominant position for continued competition. The following quote describes the CFI’s attitude to selective price-cutting:

“Where an undertaking enjoys a dominant position, it is necessary, in order to determine whether a particular pricing policy is abusive, to consider all the circumstances, particularly the criteria and rules governing the grant of discounts, and to investigate whether, in providing an advantage not based on any economic service justifying it, the discount tends to remove or restrict the buyer's freedom to choose his sources of supply, to bar competitors from access to the market, to apply dissimilar conditions to equivalent transactions with other trading parties or to strengthen the dominant position by distorting competition. The distortion of competition arises from the fact that the financial advantage granted by the undertaking in a dominant position is not based on any economic consideration justifying it, but tends to prevent the customers of that dominant undertaking from obtaining their supplies from competitors. One of the circumstances may therefore consist in the fact that the practice in question takes place in the context of a plan by the dominant undertaking aimed at eliminating a competitor.”

4.5.1.4 Compagnie Maritime Belge (CEWAL)

In Compagnie Maritime Belge the ECJ on appeal from CFI found that various shipping companies abused their dominant position by employing the strategy of “fighting ships”. The concept of “fighting ships” has been addressed by US courts before. The firms in question were members of a shipping conference which employed predatory pricing by selectively offering low prices on routes of their rival Grimaldi & Cobelfret, who was not a member of the shipping conference, this in order to eliminate the competition. When the targeted rival announced a sailing, members of the conference used their ships to offer sailing on the same route. The freight prices were significantly reduced, differing from normal prices and the subsequent loss was shared among the conference members. The prices were not below ATC and so CEWAL argued that the practice was not predatory as understood in the AKZO case. The ECJ followed the Commission’s line and focused on the practice itself, which intended to eliminate the competition. The practice was judged as abuse of a collectively held dominant position, their conduct was identical. AG Fennelly emphasized the importance of not chilling price competition even if a dominant firm is involved as price competition is the essence of free and open competition envisioned in the EC Treaty. It favours efficient firms and produces both short and long term


benefits for the consumer. He did not differentiate between collective and unilateral action. In the absence of discriminatory conduct he stated that price cuts above cost should not be considered abusive even if performed by dominant firm but in the case of a near monopoly the firm has greater responsibility of not excluding competitors. AG Fennelly points to the need to establish intention or possibility of recoupment as part of the test for abusively low pricing by dominant undertakings. In the end he agreed with the Commission and the CFI that there had been intent of exclusion. The ECJ did not follow the recoupment suggestion outright but was silent on this aspect and appeared, as done in earlier decisions, to hold open the possibility of requiring proof of recoupment in future cases. It was also the first time a definition on what competition on the merits means with AG Fennelly saying that in this case cuts across the board instead of selective price cuts could have meant competition on the merits since this would have meant recouping losses was less likely. The ECJ was largely silent on the matter and have in later cases like Oscar Bronner v Mediaprint focused more on the protection of consumers, efficiently producing what consumers are willing to buy can be an indication on what competition on the merits means.

4.5.1.5 Wanadoo

The Commission has adopted a decision against Wanadoo Interactive (subsidiary of France Télécom) for abuse of a dominant position under art. 82 EC in the form of predatory pricing in ADSL-based Internet access services for the general public. At the time of the investigation ADSL was the main technology for high speed Internet access in France for the residential and small offices market. Nearly all ADSL lines were operated by France Telecom and alternative technologies like cable networks and broadband were not developed as serious competitors. Using the predatory pricing test established in previous case law the Commission found that prices were below AVC until August 2001 and up to October 2002 they were equivalent to AVC but considerably lower than ATC. This despite taking into account factors favourable to the firm like adjustments to the cost structure evident in strongly growing market (customer acquisition cost were treated as capital expenditure and spread over a number of years instead of one single year).

The abuse was considered to have started in March 2001 when Wanadoo’s mass marketing of ADSL started. Wanadoo suffered extensive losses up to the end of 2002 as a result of this practice. The practice coincided with a plan to pre-empt the strategic market for high-speed Internet access and considerable revenue was expected in the future although in order to gain as much market share as possible the company was expecting to sell at loss in 2003 and 2004 according to internal company documents. Wanadoo’s pricing practice constrained market entry and development potential for competitors, to the detriment of consumers because of the fact that this market’s importance to the development of the information society. From January 2001 to

---

240 Commission Press Release IP/03/1025, summary of decision in Competition Policy Newsletter (2003), nr 3, p 10-13
September 2002, Wanadoo's market share rose from 46% to 72%, the market increased five times over the same period. The level of losses that a rival had to endure in order to compete with Wanadoo sent a signal that market entry was not worthwhile. No competitor had at the end of the 2002 more than 10% of the market, Wanadoo's main competitor had seen its market share tumble and another had gone out of business in 2001. Wanadoo’s conduct affected competitors on the cable market as well. Wanadoo claimed that their pricing policy was rational in the light of the problems of developing a new market and reaching medium term profitability. The calculations they submitted to the Commission were rejected as this proved that they intended to recoup losses in the future, which is an objective of predatory pricing. The calculations were also rejected since they were based on assessment of a single subscriber perspective; the Commission said that it had to be based on the overall financial situation of the activity. The Commission went on to state that a dominant firm has special responsibilities to refrain from reducing the competition.

The abuse ended in October 2002, when France Télécom lowered wholesale prices by 30%. This has had the effect that the French high-speed Internet access market has grown more rapidly and spawned more competition. In view of the severity of the abuse and the length of the period over which it was committed, the Commission imposed a fine of €10.35 million.\footnote{Wanadoo has challenged the decision to the CFI, case T-340/03} The level of fine imposed for this short-term infringement sends a clear message: the Commission will strike hard concerning anti-competitive practices designed to capture strategic markets.\footnote{http://www.ffw.com/PracticeAreas/Corporate/Competition/competition_updates_July_2003.aspx, accessed 06/05/04} Although the abuse came to an end the Commission felt it was necessary to adopt a decision because of the risk of the abuse being repeated. Protecting strategic markets like the high-speed Internet access market is a priority (in light of the objectives of the Lisbon Strategy where the EU shall become the World’s most dynamic knowledge based economy) and therefore the Commission may conduct investigation in other Member States similar to that in the Wanadoo case.

An important implication from this decision concerns the issue of emerging markets. Can and should the Commission intervene on a market which is at a nascent stage and not yet mature. The Commission stated that nothing in art. 82 EC prevents it from entering any market at any stage of maturity. If this was possible the abuse might continue unabated until the damage has been done, if there is a risk that competitors will be eliminated the Commission must act as set out in art. 3(g) of the EC Treaty and in case law (see Tetra Pak II). This is especially important on a market like the one in question where first mover advantage is imperative to build up a large installed base, reputation effects are important in this market. Another question raised is if incurred losses are inevitable in the context of a new activity. The Commission reached the conclusion that incurring substantial losses on new products like ADSL was not inevitable or necessary and was therefore not a valid defense. Wanadoo stated that their low prices should be considered legitimate because it gave more consumers the opportunity to adopt the technology and increase awareness among the general public, which eventually would benefit competitors and market development. The Commission found this defense faulty as the same objective might have been reached with more competitors and different pricing strategies from the onset; the point was that it is hard to prove either way. By using the margin squeeze test where comparisons between wholesale and retail prices are made abuse can be remedied at either level by increasing retail tariffs or lowering wholesale prices. Abuse exist if retail price is higher than wholesale (including
downstream cost). This has significance for future cases dealing with price abuse in network industries for the Commission and national competition authorities.

4.5.2 US case law
Following the 1975 publication by Professors Areeda and Turner, courts in the US have joined academia in the fervor concerning predatory pricing, issuing around 100 opinions. This activity has mainly been from lower courts fostered in part by the Supreme Court’s silence on the issue. Because of the different laws in the 50 states this thesis will only focus on cases decided by the Supreme Court as is done in the EC case law section where cases from individual Member States are not considered, only Community level cases are discussed. This delimitation is necessary for practical reasons and for the thesis to have general conclusions. In the US the analysis of predation tended to be cost-based. Prices below average variable cost were presumed unlawful while prices above average total cost were presumed lawful. If prices were in between the plaintiff had to prove anti-competitive intent for it to be considered unlawful. Recently courts in the US have put the focus on the structural prerequisites for successful predation, this development is in line with the debate in the academic world. In order to establish anti-competitive predation, it is necessary to show that prices are below cost, but also that the structure of the market permits the predator to recoup the losses incurred. The US Supreme Court has an even narrower outlook, (predatory pricing cases are rarely tried and in the case of trial the plaintiff rarely succeeds), even if recent case law hasn’t dismissed it altogether. The proof for recoupment is particularly strict. The following case presentation attempts to show the differing views in the US over time. Cases were selected on the basis of past research suggestions, cross-referencing, suggestions from interviewed individuals and because they encompass the concept relevant to predatory pricing analysis.

4.5.2.1 Utah Pie
The first “modern” decision on predatory pricing was decided by the Supreme Court in 1967. They condemned the pricing strategy of three wholesale baking companies operating in a number of different geographical markets. In Salt Lake City the baking companies competed fiercely with a small local company, Utah Pie Co. The wholesale baking companies sold their products at lower prices in Salt Lake City than at other locations, prices were below costs. Utah Pie’s market share fell considerably; at the end of the price competition they commanded a market share of over 45% and were still able to make a profit. The Court still found that the declining price structure had reduced competition because of the discriminatory pricing policy. The decision has received criticism as it seemed more probable that the wholesale bakers had managed to end a

243 OECD publications, “Predatory Pricing”, p 62, Paris, 1989. Lower Courts have adopted different solutions when it comes to relevant issues like; appropriate measure of cost, classification of cost, feasibility of recoupment, role of intent and barriers to entry. For more see: http://ls.wustl.edu/Students/Courses/Ellis/Antitrust/Predatory_Pricing_Law.htm, accessed 07/05/04
244 For more on cases from lower courts in the US see OECD publications, “Predatory Pricing”, p 64-69, Paris, 1989 and http://ls.wustl.edu/Students/Courses/Ellis/Antitrust/Predatory_Pricing_Law.htm
monopolistic situation letting consumers enjoy more choice at a lower price than engaging in predatory conduct.\textsuperscript{248}

4.5.2.2 Matsushita

It was not until 1986 that the Supreme Court handled any additional predatory pricing cases. Lower courts principally adopted some version or another of the Areeda-Turner test in the years after the authors published it in the Harvard Law Review (1975). In 1986 the Supreme Court made a decision in the Matsushita case, which concerned a dispute between American TV-set manufacturers and competing Japanese companies.\textsuperscript{249} Zenith, an American manufacturer claimed that Japanese rivals conspired to sell their products below costs in the US. At the same time they sold similar products in Japan at prices higher than costs in order to cross-subsidize the loss incurred in the US where the principal aim was to gain market share. The Court found the claims made by Zenith to be economically implausible by reference to the standard recoupment analysis. The main reason for this conclusion was that the plaintiff was claimed that the predatory pricing along with the conspiracy had been going on for over 20 years. The defendants would never be able to recover the losses sustained along the way even if they succeeded in getting a monopoly. The Court observed that a conspiracy to elevate prices usually benefits rivals, and therefore the Sherman Act is inapplicable. Hereby the Court rejects the geographic cross-subsidization argument which many predatory pricing arguments have been based on. The Court defined predatory pricing at below some measure of costs.\textsuperscript{250} The controversy surrounding the cost problem was addressed but no solution was provided. The Court stated that there is a consensus among scholars and commentators that predatory pricing cases are seldom tried and in the event of a case being tried it is very rarely successful.\textsuperscript{251} This case represented the first time the Court revealed the fundamental role recoupment was to have in predatory pricing analysis. The difficulties of co-ordination, monitoring, and discipline make predatory pricing by conspiracy far more complex and implausible than predatory pricing by a single firm as stated by the Court.\textsuperscript{252}

4.5.2.3 Cargill

The very same year of the Matsushita decision (1986) the Supreme Court reconsidered the approach taken in Matsushita in the Cargill decision.\textsuperscript{253} The plaintiff in the case, Monfort sought to enjoin the impending acquisition of the second (Excel) and third (Spencer Beef) largest beef packer companies in the US. The claim was that it would alter the market structure, subject them to elevated costs, lower prices and reduced profits by the means of harm from below-cost pricing. The Court rejected this claim because any eventual losses would be the result of fierce competition, not antitrust harm. The merged company was not in a position to pursue a successfully predatory scheme because of the lack of entry barriers and a low market share. The implications of the decision meant that the definition of predatory pricing now allowed for the possibility that some below cost pricing may be well intended and lawful. However, the Court

\textsuperscript{249} Matsushita Electric Industrial Co. vs Zenith Radio Corp., 457 U.S. 576 (1986)
\textsuperscript{250} Ibid. p 584
\textsuperscript{251} Ibid. p 584
\textsuperscript{253} Cargill Inc. v Monfort of Colorado Inc., 479 U.S. 104 (1986)
went beyond its Matsushita decision and recognized that the practice of predatory pricing does in fact occur, although rare.  

4.5.2.4 Brooke Group
In 1993 the Supreme Court produced a comprehensive analysis of the substantive standards that should be applied on predatory pricing claims. The case concerned the oligopolistic cigarette market where Liggett (Brooke Group had been renamed during the litigation process), who had 2% market share, introduced generic cigarettes, which increased sales at the expense of the major competitors. One competitor, Brown & Williamson, holding 12% of the market, introduced their own generic brand as a response. They were sold to wholesalers at lower prices than Liggett’s, along with discount and rebates. Liggett claimed that Brown & Williamson was trying to force them to raise prices so that the generic market growth would slow down, enabling B&W to reap profits from its branded lines for a longer period of time. The Court equated the standards of the Sherman and the Robinson-Patman Acts, meaning that a plaintiff must prove that prices are below an appropriate measure of costs and that the alleged predator has reasonable prospects of recouping its investment, which would result in harm to competition. The Court found oligopoly recoupment as highly unlikely and said that Liggett failed to prove possibility of recoupment by B&W. As previously done the Court declined to solve the issue of what measures of costs was most appropriate, since the parties in this case agreed that the relevant measure of costs was AVC. Since this case was decided no successful cases favouring the plaintiff have been tried because of the strict burden of evidence that need to be proven.

4.5.3 Summary

<table>
<thead>
<tr>
<th>EU</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dominant position, abuse</td>
<td>1. Market power</td>
</tr>
<tr>
<td>2. Effect on intra-community trade</td>
<td>2. Recoupment/intent</td>
</tr>
<tr>
<td>4. Recoupment?</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5.3: Summary of EU and US legislative approaches to predatory pricing

4.6 Recent developments in the EU and US

4.6.1 EU
The following cases and guidelines were suggested reading by interview sources at DG competition and previous research.

4.6.1.1 Deutsche Post AG
In the Deutsche Post AG (DP) decision in 2001, the Commission found that the company engaged in predatory pricing in the market for business parcel services. A competitor, UPS

---

257 Deutsche Post AG (Case Comp/35, 141) O.J. 2001 L125/27
complained to the Commission that DP could offer parcel-delivery services below costs by using its revenues from the letter-mail monopoly to cross-subsidize the activity. The Commission also found that DP gave fidelity rebates to its large mail-order customers, which resulted in a fine. The predatory pricing conduct was not fined, since the relevant cost measure had not been clarified at the time when the abuse commenced (1974). At present cross-subsidization between a monopoly market and a competitive market are considered predatory if incremental costs (costs which occur only when a certain activity, like a new product line, takes place and which would be avoided if the activity ceased) are not covered.\textsuperscript{258} This was the first time the Commission used art. 82 EC to formally condemn predatory pricing in the postal sector.\textsuperscript{259}

4.6.1.2 Michelin II
The CFI ruled in 2003 in the second Michelin case\textsuperscript{260} that fidelity rebates, discounts and agreements of closer service that Michelin provided to tire retailers in France were tantamount to abuse of its dominant position. Michelin set target sales for the retailers and if these targets were met they received rebates and Michelin sponsored investments for their business, the more they sold the more discount they got. In return Michelin were given access to the retailers information regarding sales and other financial details, they were obliged to allow quality controls from Michelin, always offer the latest Michelin products, promote the Michelin brand vigorously and always keep sufficient stock so that customer demand could be met immediately. These provisions made it hard for retailers to treat Michelin’s competitors in a similar fashion. As was decided in the first Michelin case a rebate system that goes on for longer than short term (3 months) is not a valid strategy as it can have an exclusionary effect on competitors. In this case the same effect was intended, Michelin wanted to consolidate their dominant position by only offering the rebates to retailers with a considerable market share. The whole system was considered loyalty inducing and had the potential of reducing competition, this because tires were sold at loss and retailers needed the rebates and other financial aid fro Michelin to be profitable. In reality this did not happen but the Commission contended that rivals might have grown larger without the rebate system. After conducting an economic analysis the Commission saw no economic justification for the rebates.

4.6.1.3 British Airways
This case contains similar elements as was evident in Michelin II, it was ruled by the CFI in late 2003.\textsuperscript{261} The issue concerned British Airways relationship with ticket agents who were given fidelity rebates if they met specific sales targets. If targets were met, extra commission was paid out to the agents. These payments were not related to any cost savings or efficiency gains

\textsuperscript{258} The Commission stresses the importance of incremental costs in its notice on the application of competition rules to access agreements in the telecommunications sector (OJ 98/C 265/02). The problem of common costs is addressed in the notice and the Commission indicates that incremental costs will be used as the lower threshold for predatory pricing in the telecom sector. This is in line with the Areeda-Turner method, where a short-run marginal cost test is used. Since AVC cost are used to measure short-run marginal costs where there are no common costs, short-run incremental costs should be used where there are common costs. See Grout, P “Recent developments in the definition of abusive pricing in European competition policy”, Center for market and public organization working, paper series nr 00/23

\textsuperscript{259} Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University, p 33

\textsuperscript{260} Michelin v Commission, case T-203/01 [2003] ECR 2003 (not yet published), case accessed from eurlex website.

\textsuperscript{261} British Airways plc v Commission, case T219/99 [2003] ECR 2003 (not yet published), case accessed from eurlex website
according to the Commission and their only purpose was to drive out competitors since they were not in a financial position to pay the extra commission. The CFI didn’t find the rebates to be economically justified even if it is common for airlines to want to fill all available seats. The payoffs of filling the extra seats does not compensate for the commission they had to pay to the ticket agents, this meant that they were only intended to drive out competitors. In reality competition was not reduced, in fact market share of closest competitors actually grew but according to the court they could have grown even more without the rebate system.

4.6.1.4 Draft notice on the application of the competition rule to anticompetitive practices in air transport
In this draft notice\(^{262}\), the Commission, as in the telecom sector notice, recognizes the difficulty in applying the AKZO test to this market, specifically the calculation of the measure of output in the airline industry. The commission stresses that it would be unrealistic to consider the predatory nature of individual fares, the entire fare mix has to be considered. The division of costs into fixed or variable is difficult in the air transport sector since many fixed costs like depreciation on aircraft vary in relation to age of the aircrafts and the frequency of use.\(^{263}\) Another complex issue in this sector is that seats are sold over a relatively long period of time, even up to minutes before departure, resulting in different pricing structures. A special test for the airline industry is therefore needed.\(^{264}\)

4.6.2 US
The following material was selected on the basis from suggestion by the United States Mission to the European Union and past research.

4.6.2.1 Department of Transportation guidelines
After the Brooke case an important development in the US has been the proposal by the Department of Transportation (DOT), which recognizes predatory pricing as a strategic problem. The guidelines focus on the airline industry and specifically the ability of a dominant air carrier to exclude competition. They rely on a gross revenue measure to identify predation instead of the traditional cost test because of the unique nature of the airline industry and local airline markets.\(^{265}\)

4.6.2.2. American Airlines
Low cost rivals competing with American from the Dallas-Forth Worth airport alleged that American engaged in predatory pricing to keep them from competing at the Dallas-Forth Worth airport hub. Other tactics used were; increasing the number of flights on respective routes and the monopolization of other routes using its reputation for predation. In 2001, a federal district judge dismissed the Antitrust Division of the Department of Justices claim, ruling that the Division had

---

\(^{262}\) Draft notice unpublished
\(^{263}\) Soames, T & Adams, R “Predatory pricing in air transport”, (1994) European Competition law review nr 3, p159
failed to prove below-cost pricing and that there was a dangerous likelihood that American Airlines would recoup its losses. This decision points to the difficulty of successfully prosecuting a predatory pricing case in the US, especially since the Department of Justice was considered to have a strong case against American Airlines.\textsuperscript{266}

5 Analysis

The fifth chapter of the thesis tries to make sense out of the empirical findings from chapter 4 with the help of theory from chapter 3. Business strategies are discussed given the legal parameters established in the previous chapter. Suggestions for refined predatory pricing analysis models will be presented as well as discussions of the implications of diverging views on predatory pricing in the US and the EU.

5.1 The diverging approaches to predatory pricing analysis in the EU and US

Even though EC competition authorities and courts could draw from the rich experience in the US, the approaches towards predatory pricing analysis differ in a number of aspects. In order for future cases to be dealt with more conformity benefiting companies and consumers it is necessary to provide a workable model to assess predatory pricing, a model that encompasses structural elements at a strategic level given the legal parameters established in chapter 4.

5.1.1 The US perspective

The US antitrust doctrine concerning predatory pricing is built around section 2 of the Sherman Act, section 5 of the Federal Trade Commissions Act and section 2(a) of the Clayton Act, which was amended by the Robinson-Patman Act. While dominance and monopoly situations are not unlawful per se the improper acquisition of a monopoly is contrary to the Sherman Act. To determine the legality of the situation the courts focus on relevant market analysis and if the dominance has come about because of growth not tied to having a superior product or other efficiency determinants. The historical aspect is also considered as it might explain why a firm have become dominant. Competing on the merits is encouraged but conduct that intends to eliminate rivals using the monopoly power is unlawful, consumer welfare in the form of lower prices often takes precedence over the welfare of competitors, which is the main consequence of using the Federal Trade Commission Act where behaviour that adversely affect the public are deemed unlawful. Competition on the merits entails analysis of the cost structure and the economic rationality of the conduct, for example in the form of recoupment possibilities. If there is a dangerous probability of success the courts often find abusive behaviour. Additional factors that are considered include market share, competitive structure of the market, barriers to entry and the legal and natural environment. This is where the benefits of a wide macroeconomic analysis model like PEST can be realized as market share alone is not conducive to a effective analysis. In the Clayton Act and Robinson-Patman Act the requirement that both dangerous probability of monopolisation and that the price-cuts directly leads to reduced competition have to be proven has been limited to only proving that the conduct will lead to substantially reduced competition. Selective price-cutting is also unlawful.

US case law analysis presents a sceptical view about predatory pricing. There has been great activity and filed abuses but convictions are rare. Influenced by cost based assessment theories like the Areeda-Turner test in early cases prices below AVC were considered predatory. Prices above ATC were lawful and if between the two anti-competitive intent had to be proven. This
represents the view the ECJ took in formulating the AKZO doctrine, which is valid today. In the US courts have recently been moving from cost based analysis to a more structural test perspective. The implications of this move means that complex and ambiguous cost analysis can be restricted to only the most relevant cases. The structural test entails using two test screens, first the market structure and an industry analysis is conducted and if the conditions are right for predatory pricing possibilities the second test uses a cost-based analysis to delve deeper into the problem. This twin test of sales below cost and a market structure conductive to predation and recoupment, have in the US made it difficult for a plaintiff to succeed in a predatory pricing claim. In *Matsushita*\(^{267}\) the recoupment requirement quashed the plaintiffs case, which depended on a geographic cross-subsidization claim. Failure to prove the possibility of recoupment often leads to dismissal of predatory pricing claims, most US courts including the Supreme Court have looked first to the recoupment standard, especially when the measure of costs is unclear. The Supreme Court did not abandon the merits of the Areeda-Turner test and other cost standards in the *Cargill*\(^{268}\) case where it was indicated that predatory pricing was rare but not extinct. The cost-based test however only had an ancillary role and the main focus was on the possibility of recoupment analysed in conjunction with entry barriers and market share, which should be considered prior to cost calculations. In the *Brooke Group* case\(^ {269}\) the Supreme Court once again highlighted the recoupment prerequisite and stated that predatory pricing in oligopolistic market structures was unlikely because of the characteristics of that market structure where competition often revolves around other factors like service and product features. After the *Brooke* decision no predatory pricing cases have been successful, as evident in the *American Airlines* case where the Department of Justice was thought to have a very strong case. Guidelines from the Department of Transport, which still rely on recoupment have begun advocating for an industry specific approach given the difficulties of analysing costs structures. To summarize, the US approach analyses market power or dominance and then if there is recoupment possibilities and how the firm behaves, its intent. If there still is a need to proceed a price-cost test is applied.

### 5.1.2 The EU perspective

The EU approach which mainly relies on art.82 EC also uses the dominance and market power to make a first assessment although it has been established that neither dominance in the form of market share or financial strength is needed in order to be found guilty of predatory pricing as ruled in *AKZO*\(^{270}\) and *Tetra Pak II*\(^ {271}\), factors like barriers to entry are as important to analyze. Barriers can be natural (related to firm efficiency and experience) or artificial which mean the erection of barriers with the specific intent of keeping out rivals. As it is impossible to set general standards of what constitute artificial barriers it has to be decided on a case-by-case basis. When analysing the market structure in order to assess the dominance of a firm, market share is a measure that is used differently across the Atlantic. In the EC lower levels might be enough to establish a firm’s dominance but in the US high shares are required (around 40-60 %). Dominance is defined as having power over price and being able to act independently of its stakeholders. To determine if there is a dominant position the relevant market from a product and geographical perspective where the substitutability and cross-elasticity of the product or service

\(^{267}\) Matsushita Electric Industrial Co. vs Zenith Radio Corp., 457 U.S. 576 (1986)  
\(^{268}\) Cargill Inc. v Monfort of Colorado Inc., 479 U.S. 104 (1986)  
is considered from both the demand and supply side. Similar to the US stance monopoly is not illegal per se but the court have repeatedly stressed that firms with dominant market power have a special responsibility to act in a manner that does not result in the elimination of competitors, either on the relevant market or neighbouring market where they are not dominant. This is so the use of cross-subsidizations is restricted, which otherwise could be used to capture market share in new markets by use of predatory pricing. Abuse of the dominant position can be either of the structure of the market or abusive behaviour intended to reduce or eliminate competition. It also has to have an effect on intra-community trade. It is imperative to keep in mind the contextual and teleological interpretation of the broader goals of competition policy as formulated in the EC Treaty. In contrast to the US approach where competition is seen as a tool for increasing the welfare of companies and society in general the EC Treaty has other goals as well. These include the protection of small and medium sized firms, the quest for European integration and the promotion of noble goals like peace, the environment and stability. The notion of competition has changed since the formation of the European Communities and is today leaning towards free competition but at times the Courts refer to workable or fair competition. Depending on the definition a firm can enact strategies that otherwise might be considered abusive. The EU is more interventionist than the US, which places an added dimension for firms deciding on strategic choice in European markets. Dominant firms have to prove that they are not reducing competition while in the US the plaintiff has to prove that the defendant is hurting competition. Abuse from a predatory pricing angle can take the form of unfair prices, either at a low level or in a discriminatory way (selective price-cutting like in the Irish Sugar\textsuperscript{272} case), the list is not exhaustive. The process of predatory abuse usually comes in two phases, first exclusionary conduct where rivals are forced out and then exploitative conduct where the now even more dominant firm uses its power over price to raise prices and recoup eventual losses incurred in the exclusionary phase. EC treatment of predation suggests a concern to protect competitors as well as future concerns from both exclusionary and exploitative abuses.

The ECJ and CFI also uses a two-tier test, not unlike the structural test advocated by Joskow and Klevorick\textsuperscript{273}, based on the cost and the strategy of the alleged predator. Contrary to the US approach the cost based test is used as the first screen. The ECJ in AKZO regarded the Areeda-Turner test as inappropriate given the facts of the case, but stated that prices below AVC should be presumed predatory. Above ATC was legal and prices in between AVC and ATC were unlawful if intent of reducing competition could be proven. The ECJ turns to a rule of reason test, analyzing market structure and intent as part of the allegation of abuse of a dominant position. The use of intent opens up the possibility of penalizing above cost pricing behaviour which can be seen as predatory according to the ECJ, this view is in line with recent academic work where non-price predation and above cost predation are singled out for legislative intervention. In AKZO the ECJ concluded that the firm would not have been able to recoup its profits lost in the initial stages of predation but instead focused on the problem of eliminating a competitor. This is in contrast with US jurisprudence, were the consequences of the consumers are prioritised. The ECJ confirmed its position that recoupment is not a necessary element of a predatory pricing case in Tetra Pak II and would not introduce recoupment as a further legal requirement since

\textsuperscript{272} Irish Sugar plc v Commission of the European Communities, case T-228/97 [1999] European Court reports 1999 Page II-02969
\textsuperscript{273} Joskow, P & Klevorick, A “A framework for analyzing predatory pricing policy” (1979) Yale Law Journal, nr 89
recoupment is the ultimate object of an unlawful predatory pricing scheme. The ECJ stated that it must be possible to penalize predatory pricing if there is a risk that competitors will be eliminated and in the interest of maintaining undistorted competition, it is not advisable to wait until such strategy leads to the actual elimination of a competitor. The ECJ in Tetra Pak II stated that the scope of the special responsibility imposed on a dominant firm must be considered on a case by case basis, which makes it clear that the main priority of EC competition policy is more than efficiency as pursued by US jurisdiction. The ECJ appears to have left open the possibility of using recoupment in future predatory pricing cases, recognising the utility of such a test used by the US Supreme Court. The application of such a test varies from case to case, which seems to indicate that the ECJ are mindful of the industry characteristics of each case, the step towards industry specific cost measure is therefore not far off. The Commission has realized the benefits of such an approach and like in the US guidelines for specific industries have been issued, for example telecom and airline industry. Because establishing the proper cost measure and calculating cost/unit is the most difficult issue to handle in predatory pricing analysis, general rules stating that anything below AVC is predatory does not translate into a fair and workable model. Recent developments include the Deutsche Post case where cross-subsidization was deemed to be unlawful if incremental costs are not covered, selective price-cutting in the form of fidelity rebates have been rules as predatory in the Michelin II and British Airways cases. The Wanadoo decision is also strategically important as the Commission contended that low prices below cost are not allowed even when completely new market is to be created, it does not matter if it isn’t mature as other pricing policies are available. The fact that companies make losses when entering a new market was not a valid defence as first mover advantages can result in a large market share at the expense of other firms. To summarize the EU uses the following test in predatory pricing analysis; first a check of dominance and abusive behaviour, effect on intra-community trade and then a price-cost test is initiated with intent of conduct then analysed. Recoupment is at present not used.

5.2 Implications for antitrust analysis

The discussion above demonstrates the differences between predatory pricing analysis in the US and the EU. Much like the situation of using a myriad of different assessment theories for predatory pricing the difference in legislation produces different outcomes that can alter the very market structure the legislation is intended to protect. Multinational companies that operate in both markets will have to adjust strategic pricing policies, not only due to market characteristics but also dependent on legal environment. The main differences regarding predatory pricing as discussed above can affect companies conduct on the relevant market, the danger is if the EU becomes more interventionist and interfere in strategic decisions that firms will establish themselves in more attractive locations where they are less restrained to compete. The danger in the US is that smaller firms will have a tougher time breaking into new markets as established giants block their entrance by various pricing policies or other forms of barriers. The protection

275 Deutsche Post AG (Case Comp/35, 141) O.J. 2001 L125/27
276 Michelin v Commission, case T-203/01 [2003] ECR 2003 (not yet published), case accessed from eurlex website
of smaller firms in the EU might also make them inefficient as they are protected in early stages making them unaccustomed to competition as the market is deregulated. Europe's slow deregulation process concerning national utility companies have resulted in monopolies that are preventing new entrants by use of cross-subsidization and other forms of predation. From recent case law developments it can be seen that the US courts take a more lax approach to predatory pricing claims than in the EU. In the US, predatory pricing claims are fairly unlikely to succeed since the introduction the recoupment standard limits the plaintiff's ability to prove predatory pricing as was evident in the Brooke Group decision. "The US view recoupment as an essential element of the test because, as the Supreme Court said, "cutting prices in order to increase business often is the very essence of competition." There are many legitimate, pro-competitive reasons for charging prices that are below cost, and there is no rational reason to deny consumers the benefits of lower prices in the absence of any realistic prospect for recouping short-term losses through later supra-competitive pricing." As some scholars suggest it is difficult enough for a monopolist to recoup its investment in predation, for oligopolists and companies operating in markets close to perfect markets the obstacles to recoupment are even greater. US competition policy uses an efficiency criteria, which results in the immediate conclusion that predatory pricing conduct means lower prices and benefits for consumers. US legislation has been more concerned with protecting the competitive process (efficiency) than protecting firms or competitors whereas EU competition authorities are more amenable toward predatory pricing complaints. Single market integration, protection of competitors and the viability of small businesses coupled with values of fairness, opportunity and legitimacy have been more important to competition authorities than in the US. This is demonstrated by the fact that dominant companies have a special responsibility not to reduce competition; the intent of the conduct is what separates justifiable strategies from unlawful strategies. "In the United States, relying on subjective intent as a basis for antitrust liability is not popular. As Judge Easterbrook has put it very colorfully, we expect firms to want "to crush their rivals if they can." In finding that Deutsche Post had engaged in predatory pricing in the market for business parcel services last year, the European Commission did not rely on subjective intent but instead adopted an "avoidable" cost standard, which looked only at the incremental or variable costs Deutsche Post incurred in providing these services, rather than at average total cost." Prominent members of the Chicago school of thought feel that intervention in predatory pricing issues causes more harm than good, this can be described as a rather specific US problem because of the established litigation nature, firms or private persons unhappy with their situation are not shy to go to court which results in a vast number of cases, especially since they normally don’t have to pay the defendants costs if they loose the case and the relatively high damages they can receive if successful. In the EU predatory pricing allegations are not that plentiful since the competition authorities are mostly responsible for initiating cases.

Reputation and signalling models in addition to other recently developed theories of predatory pricing have yet not been embraced by antitrust law on either side of the Atlantic. Leading advocates of these models call the lack of impact of these models on the development of antitrust

278 Statement from the United States Mission to Europe, William Kolasky, a deputy assistant attorney general of the Justice Department's Antitrust Division. http://www.useu.be/Categories/Antitrust/May1702USEUAntitrustCooperationKolasky.html 16/05/04
279 Statement from the United States Mission to Europe, William Kolasky, a deputy assistant attorney general of the Justice Department's Antitrust Division. http://www.useu.be/Categories/Antitrust/May1702USEUAntitrustCooperationKolasky.html 16/05/04
law concerning predatory pricing unfortunate. Game theory and the asymmetric information concept which were in vogue in the 80’s have lately been overlooked. In the US where the Supreme Court hardly give predatory pricing a second glance the models are rarely applied, performance tests and rule of reason tests are likewise overlooked. The structural test is applied more often since the recoupment test requires a study of market characteristics, if it can be proven a cost based analysis is initiated. The EU competition authorities and courts studies dominance and relevant market, abuse and intent as well as conducting cost-based analysis. The reason for why the cost-based tests are still used at this extent is because of the difficulty for antitrust law in distinguishing predatory from competitive price cuts. Above-cost price cuts are usually seen as competitive, not predatory. One implication that has emerged by using the recent models is that successful predation does not require prices to fail the Areeda-Turner, or any other cost-based test. The new models suggest above-cost predation can take place. The relevant market and other strategic industry analysis models can therefore be used to distinguish predatory from competitive price cuts. The ambiguous definitions and assessments of predation in both the EU and the US courts could be aided by the new models. The benefit of a test based on the strategic reality of the firms in combination with a industry specific analysis would be a less erroneous process where predatory pricing instances would be easier to establish and disregard.280

5.3 A proposed strategic approach to predatory pricing analysis

The main challenge of developing a workable approach to identify and analyze predatory pricing is to balance the need for companies to compete and at the same time protect the welfare of consumers and other stakeholders by applying relevant legislation. In other words to balance economic and business strategic realities with the legal environment. Despite the differences in approaches in the US and EU and between the different scholars and their assessments theories there seems to be a consensus between competition authorities and courts on both sides of the Atlantic. An analysis has to involve a structural test as well as a cost-based analysis, by providing two screens it is thought that predatory pricing can be detected with greater accuracy. Determining the appropriate measure of costs is a complex task given the special characteristics of each firm and it’s industry. There is a need for cost-based rules in order to avoid false positive and false negative errors. On both sides of the Atlantic deeming prices below AVC as predatory has been popular but that is not a general solution to the cost problem. AVC is not an appropriate measure in industries where there is excess capacity, risk of products becoming obsolete, the use of promotion campaigns etc. In the software industry, where variable costs are close to zero due to the low multiplication costs of software programs, incremental cost has been suggested as a better measure.281  The Commission notices regarding competition rules in the telecommunications and airline sectors pointed to the problems of using the same cost measures in different industries. As discussed in the economic theory chapter there are benefits and downsides to every measure of cost. The characteristics of each firm or at least each industry require that measures need to be industry based. As the industry boundaries are being blurred by IT and that a too detailed cost analysis would increase the complexity of the analysis a first test where the intent is to weed out the irrelevant cases has to be applied. This is where the structural

---


test comes into force. The difficulty to identify the appropriate measure of costs and then calculate the costs itself (performing an in depth analysis is inefficient due to lengthy inquiries in the relevant industries pricing calculations as long time frames are needed to present an accurate picture), which is ambiguous at best implies that other prior screening methods can be applied before performing complex price-cost analyses. A firm’s predatory pricing conduct often involves selective and discriminatory pricing, by condemning the discriminatory pricing as abusive under art. 82 (c) EC or under Section 2 (a) of the Clayton Act the courts could have avoided the use of complex price-cost analyses.\textsuperscript{282}

5.3.1 Industry analysis

A first screen should involve an analysis of the industry structure, the prospect of recoupment and intent. This would let competition authorities focus on cases where economic conditions make predation a strong possibility. Recoupment is only a useful strategy if there are high barriers to entry and re-entry, which will enable the firm to recoup losses and earn supra-competitive profits. The intent dimension has the disadvantage that the elimination of rivals is inherent in competition. To sidestep the issue the phrase “intent to exclude” is used to refer to conduct that isn’t economically rational unless exclusion of rivals is considered with the long-term goal of acquiring a monopoly. An industry analysis that takes into account both economic realities and business strategy options is the Five Forces framework. A wider analysis by use of the PEST model is not advisable at this stage as it doesn’t place enough focus on the most relevant aspects and would result in an incomprehensible analysis where the effect of each factor would be hard to gauge. It can be useful if used with scenario analysis to make predictions about the market and possible strategies for a firm. The main contribution with PEST is that it can detail the legal parameters a firm has to navigate in different markets.

The threat of substitutes is directly tied to the relevant market definition and the theory of interchangeability based on cross-elasticity on the demand and supply side. If there are adequate substitutes on both demand and supply side depends on brand loyalty, switching costs for consumers, price of substitutes and current trends. These factors together with economies of scale, capital requirements, credible threat of retaliation, patents and other legal factors also constitute barriers to entry. Whether or not these barriers are legal under the relevant legislation is determined from case to case, there are no barriers that automatically imply predation, it has to be determined if they are natural or artificial. To really understand the market structure, to determine if it is near monopoly, oligopoly or free competition the rivalry between established rivals have to be analyzed. This entails an analysis of the concentration ratio regarding firms and their relative size measured in market share. The legal parameters established often state that market share around 40-60 % imply dominance and thereby the firm has to be careful so it doesn’t use that power to abuse its situation and eliminate competition. At the same time, market alone is not enough to determine dominance, the entry barriers discussed above are also relevant to that end as was ruled in AKZO. Factors that need to be considered when analyzing rivalry are among others the resources and capabilities of each firm to see in what way the firm competes, what competitive advantage it has can offer important clues to its behaviour, a firm with a cost advantage as its main form of competitive advantage might be able to set prices low because of internal efficiency reasons and not because it has a specific intent of excluding rivals. The

\textsuperscript{282} Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University, p 41
intensity and form of rivalry in the industry also depend on what stage in the industry life cycle the firms operate in. This can influence the pricing structure and strategy, production scale and cost efficiencies, the market structure, the use of vertical integration to make the value chain operations more effective, the bargaining power of buyers and suppliers. Necessary questions to ask at this level are what drives competition and what are the customers needs and wants, i.e. the key success factors for survival, the decline stage offers different pricing realities than the growth and maturity stage which court must take into consideration when ruling on the effect of competition. The bargaining power of buyers is directly tied to the number of companies in the market and their size, the information availability (the application of game theory can be of use here to predict behaviour of the participants). High product or service substitutability also means that added buyer bargaining power. Supplier power is closely tied to the possibility of forwards and vertical integration, which could boost their power over price and margins. It is in every firm’s best interest to try to reduce the competitive forces. This can be done by for example lowering the price to a level below some measure of cost, by erecting entry barriers, competing by product differentiation to avoid price wars or partnering. Any of these measures can be unlawful if done excessively or with the intent of eliminating rivals. Further industry analysis and strategic analysis is required to better judge if there is such intent.

5.3.2 Game theory and first mover advantages
Since the Five Forces has shortcomings, especially in the cooperation dimension and the use of asymmetric information, game theory can be used to advance the analysis to predict competitive outcomes. The results of reputation effects and signalling are also highlighted by use if this model. A credible threat of predatory pricing can be an effective entry barrier that courts can’t directly punish, unless they use performance tests and structural tests where historic behaviour can be taken into consideration when judging if there is illicit intent behind the threat. In oligopolistic markets the historic analysis can be a useful approach to see what established rivals tend to do when faced with new rivals. History can also be used by courts to acquit a firm of any wrongdoing, for example in a monopoly situation that has arisen because of first mover advantages and the concept of increasing returns, which means that the firm ability to offer low prices or compete in another hard to overcome way depends on efficiency reasons built up over the years, for example by learning curve effects and network externalities both within the firm regarding production but also with the customers who have grown accustomed to the product and are less prone to change because of switching costs. First mover advantages can result in dominance and high market share and long periods of dominance and huge customer base can often result in efficiencies that new rivals will have a hard time matching. It also makes it hard for courts to prove abusive behaviour since the competitive advantage is the result of historic factors. The Wanadoo decision made by the Commission is indicative of this reasoning where it was established that offering customers in a new and emerging market low prices was not justifiable as it could result in low competition in a strategic market like the broadband market. Microsoft has also been convicted of similar behaviour, in their case they tried to give the product away to build an installed base and also by bundling it with already popular products where they were dominant.
5.3.3 Cross-subsidization
The use of cross-subsidization to finance such activities have been deemed unlawful by EC courts and the Commission\textsuperscript{283}, especially when the link is between two competitive markets or one regulated market and one competitive. The legality of cross-subsidization therefore depends on the market structure, which a Five Forces analysis will reveal. To judge if there has been any cross-subsidization of common costs need to be analyzed. Common costs are often found in network industries, for example in the telecom industry where the former state monopoly owns the infrastructure but competes on the market for phone service. This latter market can be subsidized by profits from the regulated market, this is forbidden by law. From a strategic point of view the cross-subsidization phenomenon can be understood by using a portfolio analysis model like the BCG matrix, which also helps to analyze competitive advantage and industry attractiveness. As a company often operates in multiple markets segments there are some segments that are more profitable than other and new segment with enormous potential, to gain a early lead in the new segment or take market share from an established rival a firm often uses earnings from one segment to prop up the loss-incurring segment. If this is done to be able to offer predatory pricing the firm will likely be caught by the Commission and the courts, in the US where the efficiency criterion is prioritized subsidies are not tolerated unless it can be shown that it a strategy to capture a new market and not to hold on to market share in market where there are more efficient rivals. The use of a dominant position to promote the firm in anther market is not lawful. Because most cases of cross-subsidization show prices above AVC it is hard for the courts to prove illicit intent, therefore other cost measures like stand-alone cost are beginning to be used more often. Cross-subsidization suffers from the same kind of definition problems as predatory pricing, depending on the definition predatory intent can be found or ruled out. Cross-subsidization can unlike predatory pricing be non-profit motivated.

5.3.4 Competitor and segmentation analysis
Because of the limitations of game theory analysis discussed in section 3.2.1 more conventional approaches to analyzing competitor behaviour is needed and competitor analysis can be used for that end. By studying competitors strategies, statements, action, goals, values, assumptions and resources and capabilities in conjunctions with studying the alleged firm in the same manner can predictions about future behaviour be made, the game theory can now be more effective because of the more accurate information. This sort of analysis is helpful in the sense that it can reveal clues about the intention of the conduct being investigated, a firm with a history and resources to engage in predatory pricing will have a harder time defending itself than a firm with a spotless record. Other benefits of conducting this type of analysis is that it can help define competitors into strategic groups, which adds more credence to the relevant market definition that is so essential for the outcome of the case. To ensure that the relevant market is defined properly segmentation analysis can be of use. As was evident in cases like Continental Can and United Brands the definition of the relevant market makes or breaks the case. The Commission need to analyze the possible segments from product and geographic perspective, the use of Key Success Factors can help in this endeavour as each segments have their own distinct KSF’s. The demand and supply side substitutability is to be judged for every segment as well barriers of mobility to see if a firm sets up artificial barriers to hinder rivals from entering the relevant segment. The Five Forces framework can be applied in each segment to analyze the competitive forces.

\textsuperscript{283} Commissions guidelines for the telecom sector, O.J. 1991, C-233/2
5.3.5 Intra-firm analysis

A careful study of the resources and capabilities of the firm will reveal what type of competitive advantage it has; this can be done by using Barney’s framework of sustainable competitive advantage (rare, hard to replicate, valuable and durable). This is an important step in the investigation of the reason behind the ability to offer low prices. Depending on what type of competitive advantage the firm has it is easier to establish if the offer is the result of superior efficiency, for example the Japanese firms applying Kaizen costing are renown for the incessant search for quality and efficiency improvements. Cost advantage can often result in low price offerings that rivals claim to be predatory. A value chain analysis can be used to break down the activities and identify cost drivers to see where the efficiency stems from. It can be from economies of scale and scope, learning curve effects, improved process design or from human resources. The US legislation which operates by using an efficiency lens is less likely than EC legislation to punish a firm with efficient operations. The opposite can happen in the EU but it is necessary to understand that there are other goals than efficiency underlying the more interventionist approach as discussed above. An advantage based on product differentiation can also be deemed as predatory if it considered being excessive product differentiation meant to make it harder for competitors to compete. This form of behaviour is known as non-price predation as discussed earlier. A reason for why predatory pricing is seen as an abuse is because of the long term effects that can result in reduced competition and less welfare for consumers. The concept of competitive advantage is contrary to that fact since a competitive advantage incorporates customer value in order to become sustainable, if the customer wouldn’t place value on the advantage it would not exist.

5.3.5.1 Pricing strategies

Pricing strategies employed by companies vary dependant on a myriad of factors (internal and external environment), each situation is unique and requires careful analysis before being deemed unlawful. Pricing policies like cost-plus and break-even pricing will have little problem passing the regulatory hurdles as they are not below cost and there is no intent to eliminate competition, they are used more for internal goals than external, furthermore they are not discriminatory. Value based pricing is a perfect example of where the competitive advantage takes the customer value into consideration, it can be caught by legislation as often entails bundling to add more value. Product mix pricing in various formats often entail the same concept but as long as the firm doesn’t use its dominance to break into a new market segment it is seen as value to customers. Competition-based pricing is a classic example of a pricing policy that can lead to convictions, especially in duopoly’s and oligopolies where price competition is avoided and competition is targeted at other factors. New product pricing strategies are also often condemned as was seen in Wanadoo where market penetration pricing was considered unlawful even when the practice can lead to more users adopting the product and getting use out of it. This sort of promotional pricing is also dependant on how long it lasts for it to be judged as promotional and not predatory. The ECJ has been silent on the issue but in the US time frames are decided from case to case. In early stages of the product life cycle market skimming pricing is used to capture the most profit from different customer segments and to acquire market share because of first mover advantages. If this is selective pricing with discriminatory intent depends on the differences in customer segments, how closely defined they are. The segmentation analysis is helpful in that regard as it can assist in proper market definition. Price-adjustment strategies are often contentious, discounts and rebates offered in return for preferential treatment of the product
or service can be deemed unlawful if it restricts rivals from competing on the same merits. This was evident in the *Michelin II* and *British Airways* cases. *Irish sugar* was an example of how segmented and selective pricing was considered discriminatory and therefore unlawful according to art. 82 (c) EC.

### 5.3.5.2 Corporate strategy

To widen the use of the segmentation analysis and value chain breakdown it is also advisable to analyze corporate strategy since this would explain why a firm chooses to locate where it does, low cost countries mean more low cost production, vertical integration or value chain outsourcing can mean more efficient operations and further reduce the cost structure. Multinational strategies and cost efficiency breakdowns can be analyzed by Porter’s National Diamond framework where factor conditions like labour cost and resources are the basis for the cost analysis, additional factors include demand conditions, related and supporting industries and most importantly the nature of the domestic rivalry, which affect the firm’s strategy and what kind of pricing policy is employed. The cost analysis details the transaction costs involved in conducting business in an overseas market and is often the basis for decisions of what type of entry strategy to use, for example joint ventures, licensing, subsidiaries etc. If a company is successful and the establishments results in profits, the revenue can be used to cross-subsidize other market entry’s or to prop up mature markets with limited growth potential but with strategic value. Growth strategies also have to consider the regulatory hurdles of passing the dominance test, big companies with multinational presence have special responsibilities not to reduce competition as established in cases like *AKZO* and *Tetra Pak II*.

### 5.3.6 Summary

A workable model to predatory pricing assessment should combine a first test of industry and intra-firm (resources and capabilities, competitive advantage, corporate strategy) analysis and strategic considerations to decide whether predatory pricing is indeed possible and probable and a second test should if needed include price cost analysis, tailored to the industry characteristics which often is hard to establish but with the detailed industry analysis from the first test it should be considerably easier to find the right cost measure. Judgments should be based on a combination of measures applied to the facts of a particular case. The assessment should take into account, industry structure (market share, barriers to entry, competitors, key success factors, industry life cycle, product segments), predatory intent, cost issues, the likelihood of recoupment, and possible business justification.
6 Conclusions

In this chapter the conclusions from the analysis and the empirical findings are presented in the form of concise answers to the questions posed in the introductory chapter. Additionally the reader will be presented with suggestions for future research areas.

6.1 Question summary

In the introductory chapter a list of questions were presented that were supposed to be the backbone of the thesis. The third, fourth and fifth chapter have dealt with these questions in varying degree of analysis. To summarize the most important findings of the thesis short answers will be presented for each question, for a more extensive discussion the corresponding sections are advised.

6.1.1 Overriding questions

Is predatory pricing a rare or common occurrence, is it necessary to legislate?

There is no direct answer to this question as can be understood by the discussion in the thesis, it entirely depends on what cost measure is applied, what assessment theory to use, what jurisdiction is used and so on. The US stance seems to be that predatory pricing is rare and irrational, at least when judged by the Supreme Court (who uses the recoupment screen to block most predatory pricing allegations) or defined by the Chicago scholars like Bork and Easterbrook who refrain from any legislation, it would be tantamount to internal protectionism which is the equivalent of anti-dumping legislation applied to imports, both measures reduces consumer welfare. Some scholars even liken it to unicorns, a rare breed indeed. If using the cost based tests it depends on the measure of cost applied if predation is to be found. Performance test and structural tests are tools to judge the conduct from multiple angles, but there is no evidence that suggest that more predatory pricing is found by using these tests, it can both prove and disprove predatory intent. From a legal perspective it is not a matter of rarity of the phenomenon, one instance is cause for legislation. Because of the legal uncertainty created by the multiple definitions of predatory pricing courts are struggling to analyze predatory pricing from a business perspective. The use of business strategy theory can help in determining how often predatory pricing occurs and therefore provide a basis for selecting a common definition that would clear the confusion at present. Researchers like Edlin who suggest that above cost predation is possible claim that predatory pricing is more common that assumed. By using the EC definition of competition policy goals predation can occur more often as the intent to eliminate a rival has precedence to efficiency goals like in the US, this would further the necessity of legislation. A source from the DG competition stated that predatory pricing is probably more common than they are able to prove since these cases are difficult to investigate. Predatory pricing is most likely to occur in oligopoly’s or duopoly’s since it wouldn’t make economic sense in a perfect market or a pure monopoly. It can also occur in new markets where rivals try to capture as much market share as possible at the start to gain first mover advantages and increasing returns.
Is there a trade-off between efficiency and the protection of competition when applying business law?

Once again it depends on who is asked. The no-rule scholars and analysts see any intervention as potentially harming and welfare reducing. This is especially true in the US where the efficiency criterion has precedence; any intervention runs the risk of making a mistake and thereby reducing welfare. In the case of predatory pricing legislation, consumers and some producers end up bearing the costs, while the high-cost producers receive the benefits. In the EU the trade-off is recognized because of the other competition policy goals including the protection of small companies at the expense of a more efficient firm, it can also be because the integration of the single market has precedence or to promote a certain social policy. Laws presumably have as their purpose to achieve/improve efficiency. However, complicated laws/regulations are costly to interpret and follow by firms. Intervention may also produce efficiency improvements, which are less than the cost of intervention. It must also be borne in mind that all market structures except for perfect competition produce inefficiencies either in the form of reduced competition and consumer choice or high prices and reduced consumer welfare.

6.1.2 Business law perspective

How does the legal environment regarding predatory pricing look today in the US and EU? Why is there a difference and what implications for antitrust analysis are there given the diverging views?

The legal environment is detailed in sections 4.4 - 4.6. The US legislation relies on the Sherman Act, the Federal Trade Commissions Act and the Clayton Act. Dominance is not illegal per se, just the improper acquisition of a monopoly situation by a non-rational, non-efficient manner. Consumer welfare has precedence over competitor protection. The Areeda-Turner test with below AVC costing is still applied but recently a move to a more structural test have been initiated where industry analysis constitutes the first step, recoupment is also a prerequisite for predatory pricing to occur as established in recent cases like Matsushita and the Brooke decision. Because of the recoupment test it is very rare that a plaintiff succeeds in a predatory pricing case. The EU stance on predatory pricing originates from art. 82 EC where three criteria have to be fulfilled, dominance (not illegal, just have special responsibility to ensure that its behaviour doesn’t reduce competition), abuse and an effect on intra-community trade. Relevant market defines demand and supply structure. Recoupment is not necessary to prove predatory pricing, the risk that a rival can be eliminated has precedence, the intent of the conduct is the deciding factor. Cost test is the same as in the US, Areeda-Turner with prices below AVC deemed to be predatory. The difference can be explained by the broader competition goals that exist in the EU that aim to protect small businesses, the environment, social policy and promote the integration of the single market. The diverging views mean that different outcomes can be expected and efficiency is not as prioritized in the EU. Differences can also be traced to the different legal systems that are in existence, the common law system in the US which is based on case precedents, and the EU approach which is a mix between the common law system and the civil law system (based on statutes and codifications).
What business strategies can be considered legal under the present legislative environment in the US and EU? Does it go beyond competition on the merits? What strategy concepts are essential for the structural analysis?

Both the US and the EU uses a cost–based test, as long as prices are not charged below cost the pricing scheme is legal. That demands the question of what costs may be. Under section 5.3 the proposed business strategies are discussed in relation to the legal parameters. In the US companies are freer to compete on the merits, it is very seldom that a predatory pricing claim is successful since recoupment has to be proven. Under EC legislation intent of eliminating competitors have overriding precedence. By using the strategic framework beginning with industry analysis (Five Forces, Key Success Factors, game theory, competitor analysis, segmentation analysis, industry life cycle) and continuing with intra-firm analysis (resources and capabilities, competitive advantage, strategic pricing and corporate strategy) strategic intent can be established with greater accuracy and also help in establishing a relevant cost measure in case an economic price cost test need to be initiated. This will ensure that true predation is caught and justifiable strategies are cleared.

How is cross-subsidization seen from a legal perspective?

The use of certain forms of cross-subsidization have been deemed unlawful by EC courts and the Commission, especially when the link is between two competitive markets or one regulated market and one competitive. The legality of cross-subsidization depends on the market structure, which a Five Forces analysis will reveal. To judge if there has been any cross-subsidization the occurrence of common costs need to be analyzed. Common costs are often found in network industries, for example in the telecom industry where the former state monopoly owns the infrastructure but competes on the market for phone service. This latter market can be subsidized by profits from the regulated market, this is forbidden by law. In the US where the efficiency criterion is prioritized subsidies are not tolerated unless it can be shown that it a strategy to capture a new market and not to hold on to market share in market where there are more efficient rivals. The use of a dominant position to promote the firm in another market is not lawful. Because most cases of cross-subsidization show prices above AVC it is hard for the courts to prove illicit intent, therefore other cost measures like stand-alone cost are beginning to be used more often. Cross-subsidization suffers from the same kind of definition problems as predatory pricing, depending on the definition predatory intent can be found or ruled out. Cross-subsidization can unlike predatory pricing be non-profit motivated.

6.1.3 Business strategy perspective

Why is business strategy needed in predatory pricing analysis, what are the benefits of a structural test? What is the connection to economics and business law? How will a better analysis model be structured?

A purely cost-based approach is not adequate since the complexity of economic analysis overloads courts with work and they don’t recognize predatory pricing business strategies, for example the use of cross-subsidization. To show illegal pricing policies there has to be an industry analysis based on the general economic concepts that apply to predatory pricing as well as intra-firm analysis. The use of the industry and intra-firm analysis will result in better knowledge about the specific situation of the firm and its environment (to judge if the used

---

284 Commissions guidelines for the telecom sector, O.J. 1991, C-233/2
strategies are within the legal parameters) and therefore a more useful and accurate cost measure can be applied that better reflect the relevant costs to the particular industry. In establishing an economically and legally workable rule, two factors are crucial. Given the complexity of economic cost analysis the courts must not be faced with vast amounts of data adding to the backlog of cases. The proposed structural test gives antitrust authorities the chance to study the relevant markets and only refer cases to the courts when predatory pricing is very probable given the structural analysis. This analysis would also reduce the risk of making positive and negative errors, which in the end would do more harm than good as the Chicago school claim.

**What is the connection between cross-subsidization and predatory conduct?**

Cross-subsidization is considered predatory behaviour and most often come in the form of predatory pricing. Cross-subsidization tends to be a hallmark of regulated firms using monopoly situations to finance activities in competitive markets. Cross subsidization of some operations will exist for various reasons, for example to build a new market segment but rarely to undercut a competitor. The cost measure is hard to define as common cost analysis requires detailed knowledge about the different products. It does not make economic sense to “cannibalize” a profitable sector of a business in order to keep an unprofitable sector going unless there is good reason for it, this might entail the possibility of the unprofitable sector later becoming profitable, or perhaps the activities of an unprofitable sector are necessary for other sectors to be functional. For example, one can argue that research and development divisions of firms are unprofitable by themselves, in that year in and year out the costs of such divisions will be greater than any short-term revenues they might produce. Although the two are somewhat conceptually related, cross-subsidization can occur without predatory pricing taking place, and vice versa.²⁸⁵

### 6.1.4 Economic perspective

**What economic concepts are necessary to include in predatory pricing analysis, connected to the business strategy analysis?**

Basic economic concepts like demand and supply, cross-elasticity and interchangeability, market efficiency, barriers to entry and recoupment possibilities, control over price are some factors that need to be analyzed and which can affect business strategies. Since pricing analysis is so imperative to predatory pricing cases there is a need to define market prices and various prices for the factors of production that will be used to make the good in question. The underlying analysis rest on a study of market structure, this entails determining if the market is a monopoly, oligopoly, or if there is monopolistic competition. The perfect competition model is important to understand as many supplemental models like Porter’s Five Forces are based on this type of market structure.

**What different cost measures are used today and are to be used in the future?**

What type of cost measure to use is one of the biggest problems in predatory pricing analysis, problems in finding the right measure that takes the industry or product characteristics into

consideration is a desired outcome as this will ensure accurate analysis. Recent legislative developments point in this direction both in the US and EU where competition authorities have realized that the courts have trouble convicting companies since standard cost measures often fail to show the proper cost structure and price level. The structural test proposed in this thesis and as advocated by scholars can provide the right tools to simplify the search for the right cost measure by conducting a thorough industry analysis. Common cost measures used in the different assessment theories include, fixed and variable costs, average costs like AVC and ATC, marginal cost and incremental costs. Each measure has benefits and drawbacks depending on the situation, no universal measure exist although AVC has been used extensively in both the US and EU since the Areeda-Turner test was introduced in 1975.

Which assessment theories are used today and what are the implications for predatory pricing analysis? Because of the need to balance competition with consumer welfare many different theories of assessing predatory pricing have been suggested. The vastly diverging views have a negative effect on the uniform application of law, even in the US where local courts are free to use whatever assessment theory they choose even if the Supreme Court have stated that they see predatory pricing as a rare phenomenon. The effect of differing views is evident in the US-EU rift that has the EC courts taking a more interventionist approach because of the broader competition goals as opposed to the single aim of efficiency in the US. Predatory pricing is defined politically, as one might expect, since in the real world costs are subjective. Legal decisions reached in the area of predatory pricing are by nature political. The assessment theories range from the no-rule approach advocated by the Chicago school who claim that intervention causes more harm than good, to the cost-based approach proposed by Areeda-Turner where the use of AVC was adopted. This model is simple and other cost test focus on the long term. Other researchers are calling for a more long term cost approach or that a rule of reason where historic behaviour is judged or performance after the exit of a rival. A recent trend is the structural tests which uses a multilayered approach that first judges market structure, entry barriers, competitive situation etc and then if needed is a cost based test used. This way the complex economic analysis can be saved for the most obvious cases.

6.2 Concluding Remarks

Ever since the phenomenon of predatory pricing came under the antitrust radar in the Standard Oil case it has spurred debate, which was accentuated after McGee’s article in 1958 where he reexamined the Standard Oil case and claimed that no predatory pricing had taken place. He was supported by a number of scholars (the Chicago school) and legal commentators who stated that predatory pricing was an irrational strategy and therefore its existence was questioned. Other researchers focused on the economic side and came up with cost analysis approaches like the Areeda-Turner test. This cost based approach was adopted by US courts and later on EC courts. The past 20 years have seen the introduction of game theory concepts and some researchers even desire more advanced approaches where historical, structural and performance tests are applied. At the same time the US Supreme Court has taken the view that predatory pricing is very rare while the ECJ has taken a more analytical approach, mainly because of the different competition policy goals that are enshrined in the Treaty as opposed to the US where efficiency is the main criterion. As the discussion shows, there is little agreement on the details on how to deal with
predatory pricing, the debate centers around what cost measure to use, if recoupment should be used a prerequisite, what kind of structural test can be used and if the negatives outweigh the benefits of lower prices. What has become clear despite the transatlantic rift is that a purely cost-based approach will not be enough as it doesn't recognize the complexity of predatory pricing business strategies, for example the use of cross-subsidization. Additional tests are needed in order to correctly identify illegal pricing practices; this includes the use of industry analysis models that are based on the general economic concepts that apply to predatory pricing as well as intra-firm analysis. The consensus also extends to the fact that a cost-based test is still needed after a structural test has been initiated, the use of the industry and intra-firm analysis will result in better knowledge about the specific situation of the firm and its environment and therefore more useful and accurate cost measure can be applied that better reflect the relevant costs. In establishing an economically and legally workable rule, consideration of the courts ability to handle the vast amount of information so the backlog of cases decreases is imperative. The proposed structural test gives antitrust authorities the chance to study the relevant markets and only refer cases to the courts when predatory pricing is very probable given the structural analysis. This analysis would also reduce the risk of making positive and negative errors, which in the end would do more harm than good as the Chicago school advocate. The proposed test includes the following: an industry and intra-firm analysis, which would show if predatory pricing is likely to occur, if there is a likelihood of predatory pricing, a cost based test is initiated using a cost measure based on the industry specific information revealed in the industry and intra-firm analysis. Both US and EU courts apply versions of a two-tier test with varying results in terms of finding predatory pricing accusations valid. The more restrictive approach in the US can be explained by the efficiency criterion and the existence of broader competition policy goals in the EU in conjunction with the differing legal systems.

6.3 Suggestions for further research

Given the economic implications and the enormous scope of the subject there are several interesting venues left to explore. This thesis was general in nature; investigating one particular industry or company can be of interest as the level of detail gathered about the company and its particular resources and capabilities will give the possibility of supplying even more accurate strategic options. Personal interviews with key management would give more detailed knowledge about the thoughts and strategic imperatives of the company than can be gathered from secondary sources. The phenomenon of cross-subsidization and its connection to State Aid is an interesting topic as it puts focus on the public sector and how it competes with the private sector. A suggestion would be to focus on a former state monopoly and compare pricing practices with a private competitor. The issue of discrimination in the form of selective price-cutting has been touched upon in this thesis but the particular characteristics of each situation are so specific that a case study could be interesting to conduct where focus is put on one company and its relations to a number of partners or clients to see what can warrant different pricing policies.

Non-price predation is another area left untouched in this thesis, a study of predatory promotion or financial predation could be conducted and compared to predatory pricing to see what similarities and dissimilarities exists and which form of conduct that results in reduced welfare. For the mathematically inclined, a more detailed economic analysis of predatory pricing and its welfare effects could be conducted to settle the dispute of the protection of competition contra efficiency gains.
7 Bibliography

7.1 Published sources


Areeda, P & Turner, D F “Predatory pricing and related practices under section 2 of the Sherman Act” (1975) Harvard Law Review nr 88


Bolton, P, Brodley, J & Riordan, M “Predatory pricing: Strategic theory and legal policy”, (1999) Center for Economic research, nr 9982


Cattermole, E “The development and implications of collective dominance in EC Competition Law” (2000), Lund University

Corney, D “Predatory Pricing: Cleared for takeoff” (2001), Business Week May 14, 2001


Lindberg, Richard The Ambiguity of Predatory Pricing: Strategy as a Clarifier

Elhauge, E “Why above cost price cuts to drive out entrants are not predatory – and the implications for defining costs and market power” (2003) Yale Law Journal 112:4


Gifford, D J “Predatory pricing analysis in the Supreme Court” (1994), The Antitrust Bulletin, nr 39


Joskow, P & Klevorick, A “A framework for analyzing predatory pricing policy” (1979) Yale Law Journal, nr 89


Koller, R H “When is pricing predatory?” (1979) The Antitrust bulletin, nr 24


Kotler, P and Armstrong, G “Marketing: An Introduction” (2003), Prentice Hall, New Jersey, chapter 10

Lindberg, Richard  The Ambiguity of Predatory Pricing: Strategy as a Clarifier

Martinez, L M “Predatory pricing literature under European competition law: The Akzo case” (1993) *Legal issues of European Integration*, vol 2


Niels, G & Ten Kate, A “Predatory pricing standards, is there a growing international consensus” (2000) *The Antitrust Bulletin*, vol 45


Soames, T & Adams, R “Predatory pricing in air transport”, (1994) *European Competition law review* nr 3


7.2 Electronic sources

Barthel, C “Predatory Pricing policy under EC and US law”, (2002) Master Thesis, Faculty of law, Lund University from: http://www.jur.lu.se/Internet/english/essay/Masterth.nsf/0/3C4189D171765812C1256BC9002B6A18/$File/xsmall.pdf?OpenElement (This source has been used as a background to the thesis, it has provided suggestions to literature and case law, concepts to use and how to structure parts of the thesis). It has particularly used in the following sections which has been referenced to throughout the thesis: 3.1.5.1 Market conditions, 3.1.5.2 Barriers to entry and re-entry, 3.1.5.3 Financial requirement, 3.1.5.4 Recoupment. The assessment theories in section 3.1.6 have also borrowed discussion from this source. Section 4.1 and 4.2 - the concept of predatory pricing and predatory pricing in different industries. It has also provided suggestion for legislation and case law, sections 4.4.2, 4.5, 4.6. In the sections where the source has been referenced the author has used the research as a starting point for the discussion but has there on after expanded the discussion, by going deeper into the analysis and providing new perspectives.


7.3 Cases

Cargill Inc. v Monfort of Colorado Inc., 479 U.S. 104 (1986)
Europemballage Corporation and Continental Can Co Inc. v Commission of the European Communities, case 6/72 [1973]
Hoffman-La Roche & Co. AG v Commission, case 85/76 [1979]
Irish Sugar plc v Commission of the European Communities, case T-228/97 [1999] European Court reports 1999 Page II-02969
Michelin v Commission, case T-203/01 [2003] ECR 2003 (not yet published), case accessed from eurlex website
Nederlandsche Banden-Industrie Michelin v Commission, case 322/81 [1983], CR p 299
Standard Oil Company of New Jersey v US 221 U.S. 1, 47, 76 (1911)
United Brands Company and United Brands Continental BV v Commission of the European Communities, case 27/76 [1978]

7.4 Reports and email sources

Commissions guidelines for the telecom sector, O.J. 1991, C-233/2
Commission Press Release IP/03/1025, summary of decision in Competition Policy Newsletter (2003), nr 3,
Grout, P “Recent developments in the definition of abusive pricing in European competition policy”, Center for market and public organization working, paper series nr 00/23
O.J. 1991, C-233/2
“Rapport des Chefs de Délégations aux Ministres des Affaires Etrangères” Secretariat of the Intergovernmental Conference, Brussels, 21/04/56
United States Code Annotated Title 15: Commerce and Trade, Sections 1-7; 12-27, (1973)
United States Code Annotated Title 15: Commerce and Trade, Sections 12-27, (1973)
United States Code Annotated Title 15: Commerce and Trade, Sections 41-58, (1973)

Sven Norberg DG Competition in Brussels,
William L. Anderson at Frostburg State University,
Kenneth Fjell at the Norwegian School of Economics and Business Administration,
Robert Jackson at the Canadian Competition Bureau,
William Kolasky at the United States Mission to Europe
Cato Policy institute
Appendix

E-mail questions posed in the questionnaire.

- Would you define predatory pricing as a rare or common occurrence? Is it necessary to legislate? In what industries it is most likely to exist and in what type of market structure?
- Is there a trade-off between efficiency and the protection of competition when applying business law?
- What are the biggest problems today with proving predatory pricing?
- How has predatory pricing been judged during the past century?
- Why is there a difference in how the EU and the US perceive predatory pricing? What are the implications for antitrust analysis given the differing view on predatory pricing in these jurisdictions?
- What important cases and legislation deal with predatory pricing in the EU and US? What are the most recent developments and where do you think the courts are headed in their application of the law?
- Given the legal situation in the US and EU what business strategies can be considered legal? Does it go beyond competition on the merits?
- Is business strategy needed in predatory pricing analysis, and if so why is it needed? How is business strategy connected to economics and business law?
- Is there a need for a new and improved structural predatory pricing analysis model? How will such a model be structured?
- What strategy concepts are essential for the analysis model?
- Are industry-based tests necessary?
- What is the connection between cross-subsidization and predatory conduct, is it a form of predatory pricing? How does the legislative arena treat cross-subsidization?
- What economic concepts are fundamental in predatory pricing analysis, how are they connected to the business strategy analysis?
- What different cost measures are used and are likely to be used in the future?
- Which assessment theories are used today and what are the implications for predatory pricing analysis?
Article 82 EC Treaty

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 insofar 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 other 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.

Relevant US legislation which is lengthy and not suitable for inclusion in the appendix can be found at the following site: http://www.usdoj.gov/atr/foia/divisionmanual/ch2.htm