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Datum: 2007-02-02

# Tying under EC Competition Law

## *The Tetra Pak II Case*

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## Abstract

This paper discusses tying, a practice which, when used by large firms, has in the past been treated as anti-competitive and therefore undesirable. In the European Community, tying has been assessed in only a few court cases. The so called Tetra Pak II case was one such case. There, the court held that the defendant, Tetra Pak, was using tying in order to obtain market power by excluding its competitors. This judgment was controversial already back then and even more so today, above all in light of advancements made in economic theory on tying. These advancements have resulted in a call for a more economic, effect based approach to tying cases, rather than a form based approach. This, paired with the fact that tying has recently been tried in court, in the Microsoft case, have prompted me to go back to review the Tetra Pak II case, applying the proposed effect based approach. I have found several difficulties in doing so, but also, more interestingly, I have found that using an effect based approach in the Tetra Pak II case could, and perhaps even should, have resulted in a different outcome of the case.

*Keywords:* Tying, Tetra Pak, Article 82, Dominant Position, Competition Policy

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# 1. Introduction

Every firm in a competitive market will seek to limit the extent of the competition it faces. Firms differentiate their products, seek patents and pursue aggressive advertising strategies, all in order to get ahead of the competition. Other firms react with strategies of their own, whereby existing products are improved and new are invented. Prices go down and product quality and product variety go up. All of this will eventually, and to some extent, benefit the consumer. Yet there are other strategies by which a firm can limit the competition it faces. Generally, the firm can behave in a way so that existing competitors are forced to exit the market and/or so that potential competitors are kept out. Such practices can hardly be said to benefit neither competition nor consumers. This paper deals with one such practice, tying, which historically has been perceived to constitute an exclusionary, anti-competitive abuse. However, economists are now raising concerns that the assumption of tying being an undesirable practice overlooks the fact that tying can have other effects, some of which may actually serve as *pro-competitive* and be beneficial to consumers. Therefore, economists and competition authorities alike are beginning to ask themselves: Should the practice of tying be approached in a different manner?

## 1.1 Issue

Tying is a practice which is extensively used in various markets. Two of the few, but important, tying cases in the European Community (EC) are the *Hilti* and the *Tetra Pak II* cases. The relative absence of tying cases in the EC since then could have multiple explanations. The substantial fines paid by these companies, Tetra Pak in particular, could have had a deterring effect. Still, this does not mean that the practice of tying has stopped altogether. In fact, many would argue the opposite: that tying occurs all around us. Recently, however, tying was once again at the center of attention in the EC, as the Commission charged Microsoft of illegally tying its Media Player application to its Windows platform. In light of that case, one may wonder if we perhaps are seeing a shift from the classical,

contractual form of tying towards a more technological form. That is, a form of tying where products are integrated into system, by means of tying. As previously mentioned, since the Tetra Pak II case, advances in economic theory have been made, particularly in the field of tying, making it worthwhile to go back and study that case again.

## 1.2 Purpose

The purpose of this paper is to analyze tying in the Tetra Pak II case in light of recent developments in economic theory. The idea is to shed more light on the practice of tying, which is commonly used and highly desirable by many firms, but which still appears to be frowned upon by competition authorities and courts. More precisely, I will review the Tetra Pak II case, using the recently proposed effect based approach to article 82, and in doing so perhaps trying to determine whether the outcome could have been different had the case been tried today.

## 1.3 Structure and Material

To achieve the aforementioned purpose, I have chosen, as a first step, to provide a background to the concept of tying. I begin by defining the practice itself, explaining the potential effects, both anti-competitive and pro-competitive, that may arise from tying.

I then proceed with a chapter on competition policy, primarily focusing on its general principles and on the competition laws of the EC. The next chapter will directly address the Tetra Pak II case. Using the Commission's decision, I will first provide a background to the case by describing the complaint and the industry. I will then move on to the Commission's definition of the relevant market, then on to market structure and dominance, market behavior and, finally, Tetra Pak's response.

In the analysis chapter, I will first describe the two different ways of how to approach an article 82 case; the form based approach, which was used in the Tetra Pak II case, and the effect based approach, which has recently been proposed. I will then look at the implications of applying the effect based approach to the Tetra Pak II case.

This paper is to a large extent based on other papers and articles on tying. Premier sources of information have been the works of Barry Nalebuff, particularly his paper “Bundling, Tying and Portfolio Effects”. Other substantial sources have been the works of other economic and antitrust scholars. Economic literature has also been employed, primarily books on industrial organization and industrial economics. For the competition policy chapter, I have made extensive use of books on Community law, competition policy and competition law. For my analysis I have made use of a report ordered by the Commission from the Economic Advisory Group for Competition Policy (EAGCP).

## 1.4 Delimitations

The reasons for using tying are many and the theory behind this practice extensive, leading into other, highly complicated fields of industrial organization. Price discrimination, for instance, is one such a field. Yet, for the purpose of this paper, I see no use in going into detail in such fields. Instead, I believe it is sufficient to briefly address the other fields, providing a short explanation to what they are and why they are relevant to tying. I will, however, provide examples of further reading, so these topics, if need be, can be reviewed further.

In reference to the choice of case, Tetra Pak II, a further delimitation must be made. The Tetra Pak II case cannot be regarded as purely a tying case. In fact, this case involves several practices by the firm, many of which being *potentially* abusive under article 82. These will not be directly assessed in this paper, but must still be taken into account. This of course raises the question of why not simply choosing for instance the Hilti case, which came before Tetra Pak II. The answer is that the Tetra Pak II case, in addition to reinforcing the findings in the Hilti case, raised a few new interesting issues. Also, essentially revolving around food, the Tetra Pak II case appears more relevant to consumers.

## 2. Theory of tying

### 2.1 Defining Tying

Tying is the practice of making the purchase of one product conditional on the purchase of another. That is, to obtain product A, product B must also be purchased.<sup>1</sup> Product B, however, is still available individually. Product A is regarded as the *tying product* and product B as the *tied product*.<sup>2</sup>

Selling two or more products together is generally known as *bundling*, a practice which has three subtypes: pure bundling, mixed bundling and tying. Pure bundling is selling two or more products together in fixed proportions and at a fixed price, with the implication that none of the products are available on an individual basis.<sup>3</sup> Under mixed bundling, all of the bundled products are available individually. The bundle, however, is usually sold at a discount compared to the sum of the individual prices. Tying can thus be regarded as a “special case of mixed bundling and a dynamic form of pure bundling”.<sup>4</sup>

Product bundles, whether pure, mixed or tied, are common. In reference to tying, the presence of such bundling is not always apparent. Consider for example cars. Car manufacturers always sell their cars with certain basic features, for instance seat belts, a steering wheel etc. The latter two can be purchased separately, but the rest of the car, as one unit, cannot. Therefore, cars are systems, integrated through tying or more precisely technological tying. Often the tied products are complementary, making one practically useless without the other. One example is computer printers, where the tying product, the printer itself, would be useless without a toner cartridge, and vice versa. But tying can also involve products which are distinct, i.e. products which, in the absence of tying, have separate demand.<sup>5</sup>

Tying can be *contractual* or *technological*. A computer operating system (OS) is an example of technological tying. One example is when a web-browser is integrated into the OS

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<sup>1</sup> Nalebuff 2003:15.

<sup>2</sup> Martin 1988:396.

<sup>3</sup> Nalebuff 2003:13 and Pepall et. al. 2005:166,169.

<sup>4</sup> Nalebuff 2003:15.

<sup>5</sup> Tirole 2005:8

and cannot easily be removed without harming the OS itself.<sup>6</sup> Contractual tying exists when the purchase of one product involves a contractual obligation to also purchase another. Tying can also be explicit or implicit. Implicit tying, or virtual tying, can be said to exist when the products *can* be purchased separately, but that certain circumstances make this opportunity available only in theory and not in practice. Examples of such circumstances can be a firm refusing to honor warranties if the customer uses other firms' products with the tying product, or when the tied product is sold by the tying firm at a price low enough to remove any incentive for the customer to purchase it elsewhere.<sup>7</sup> Tying, whether technological or contractual, explicit or implicit, could take place between goods, goods and services and conceivably also between only services.

## 2.2 Effects of Tying

Tying could be used for a variety of different reasons, or motives. Sometimes the motive does not match the effect on the market, and in the end, the effects are what matter the most. The effects on the market can be divided into two categories: *anti-competitive effects* and *pro-competitive effects*.

### 2.2.1 Foreclosure

Foreclosure is an anti-competitive effect and can be said to exist when one firm, through the use of certain practices, is able to force competitors to exit the market or to prevent potential competitors from entering it. To be able to foreclose competitors, a firm must have *market power*. Market power is generally defined as the ability of a firm to set its prices. But for the purpose of tying, market power may be more accurately described as the ability of a firm to act independently of its competitors.

Tying can cause foreclosure when a firm uses its market power in the tying market in order to create market power in the tied market. This is a form of *market power leverage*, which in turn can be defined as a strategy where a firm uses its market power in one market to

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<sup>6</sup> Nalebuff 2003:14 and Pepall et. al. 2005:166.

<sup>7</sup> Nalebuff 2003:80-1 and Carlton & Waldman 2000:5.

create effects in another.<sup>8</sup> These effects could serve to protect the firm's market power in the first market, to extend it to the second market, or both.<sup>9</sup>

Prior to the rise of the Chicago-school line of reasoning, tying was considered purely a means of market power leverage.<sup>10</sup> The Chicago-school scholars held that market power leverage was, if not impossible, then at least questionable from a firm's point of view. Essentially, the Chicago-school claims that only one monopoly profit can be made, which in turn makes monopolization of the second market pointless.<sup>11</sup> However, the Chicago-school argument rests on a series of heavy assumptions, the major two being that the tied market operates under perfect competition and constant returns-to-scale.<sup>12</sup> Most markets do not operate under such conditions. In fact, some argue that when the tied product market is oligopolistic and scale economies are present, tying to leverage market power and cause foreclosure can prove successful.<sup>13</sup>

If leveraging market power is indeed possible it could be done to achieve the two major goals which were briefly mentioned earlier. Firstly, a firm producing both products may want to create market power in the competitive market. If the firm holding market power in the tying product market ties its sale of this product to the sale of another, for instance complementary product, other firms offering only the complementary product will start losing customers. The lost customers are those who want the combination of both products. Losing enough customers, competitors may be forced to exit the tied product market, allowing the firm with market power in the tying product market to achieve this in the tied product market as well.<sup>14</sup> Secondly, the tying firm may want to protect its market power in the tying market. This is of course only relevant when market power in that market is not the result of a patent, since there would then be no need for any other form of protection. The firm aims to prevent entry into the tying market, which may be deterred when a potential competitor is faced with not only having to produce the tying product but also the tied product, provided of course that the tied product is not available from other producers. Producing both products increase the initial investments needed, i.e. raising the fixed entry costs.

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<sup>8</sup> Choi 2004:5.

<sup>9</sup> Evans & Salinger 2004:19.

<sup>10</sup> Choi 2004:5.

<sup>11</sup> Whinston 1990:837-8 and Nalebuff 2003:20-1.

<sup>12</sup> Whinston 1990:838.

<sup>13</sup> For a more extensive description, see Whinston 1990.

<sup>14</sup> Tirole 2005:17-8.

I will take no stance as to which view I believe to be the most plausible. It suffices to observe that there is a divergence in economic theory on this subject. When the Chicago-school criticism was raised against leverage theory, price discrimination, which is discussed below, came to be viewed as the predominant reason behind tying. With the emergence of the new leverage theory, this may have changed slightly. Both views must be taken into serious account and one must also recognize that a firm may use tying to achieve both. The lack of a uniform theory on market power leverage may be problematic when using an effect based approach on tying cases, which will be addressed in the analysis chapter of this paper.

### 2.2.2 Price Discrimination

Tying can also be used as a means of achieving price discrimination. Price discrimination is a form of non-uniform pricing where a firm charges different customers different prices for the same products. A firm would want to price discriminate for two reasons. By charging customers who are willing to pay more than the uniform price a higher price the firm can extract more consumer surplus. In addition, the firm will be able to attract more customers, i.e. the customers whose willingness to pay is less than the uniform price.<sup>15</sup>

Tying may help to achieve perfect, or third degree, price discrimination. Under perfect price discrimination, a firm sets individual prices for individual customers that exactly match their maximum willingness to pay. Therefore, price discrimination requires that the firm is able to set its own prices, which, under perfect competition, firms cannot. A monopolist, being the sole provider of a product, is free to determine its price. A monopolist would typically set the product's price above its marginal cost, enabling the firm to make positive profits. Such a firm has market power. The key is that there are no viable substitutes for the monopolist's product, i.e. making substitution impossible, whereas under perfect competition, substitution is infinitely possible.

Yet, most markets are neither monopolized nor perfectly competitive. For various reasons, the premier perhaps being product differentiation, substitution is more difficult. Therefore, the less the threat of substitution, the greater the possibility of setting the price and, by implication, the greater the market power of that firm. Thus even competitive firms with a certain degree of market power can engage in price discrimination. It must be noted, however,

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<sup>15</sup> Perloff 2004:388-9.

that consumers will attempt to avoid price discrimination. In fact, when there are no viable substitutes, consumers tend to create their own. The efforts of consumers trying to avoid price discrimination may lead to extra costs and by extension, social inefficiencies.<sup>16</sup>

A firm with market power wishing to price discriminate is faced with two main obstacles: determining the willingness to pay and to prevent resale of the product between different customers. The latter may be difficult to ensure, but the former can be achieved by means of metering, either by direct metering or by using tying. Direct metering involves installing a metering device onto, for instance, a copying machine. The device then records the number of copies made. Yet, there are certain circumstances which may make the practice of direct metering difficult. Metering devices cannot easily be installed on all types of products. Some may have characteristics that make direct metering impossible, while in other cases, installing a metering device could substantially increase the cost of the product itself.<sup>17</sup> In such cases, tying may prove a better metering device.

If the purchase of a product is tied to the purchase of *consumables* for that product, the tying firm can measure each customer's use of the tying product by the amount of consumables purchased. To do so, the firm should either offer the tying product as a lease or to sell it at a low price, in order to attract both light and heavy users. By forcing the customer to also purchase the tied product, i.e. the consumables, for which the firm charges a higher price than would there be no tie, the firm separates the light users from the heavy. Light users, who otherwise would consider the tying product too expensive for their intended level of use, may now be able lease or purchase the product, thus broadening the tying firm's customer base. Simultaneously, heavy users also get the tying product at a cheaper price than before. But since consumables are now more expensive, heavy users will now have to pay more for their level of use, up to the point where this equals their willingness to pay. Thus the tying firm can extract more consumer surplus and therefore increases its profits. The consumables, e.g. toner cartridges, serve as metering devices, much like the counter on the copying machine.

It is very difficult to assess whether price discrimination is anti-competitive or even pro-competitive. In its discussion paper of 2005, the Commission claims that price discrimination is anti-competitive.<sup>18</sup> However, some economists claim that price discrimination can have pro-

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<sup>16</sup> Nalebuff 2003:77-9.

<sup>17</sup> Ibid. p. 74

<sup>18</sup> DG Competition Discussion paper paragraph 179

competitive effects<sup>19</sup> while others hold that the effects are simply unclear.<sup>20</sup> One can therefore firstly conclude that there is no consistent theory on the effects of price discrimination and secondly that the potential effects, whether anti-competitive or pro-competitive, are ambiguous.

### 2.2.3 Pro-competitive Effects

In theory, foreclosure and price discrimination both have in common that market power must be present in the tying product market. Tying, however, is also common in markets where there is no, or only very weak, market power, i.e. in competitive markets.<sup>21</sup> Therefore, it is obvious that tying can be used for other reasons and having other effects.

The efficiency gains that stem from realizing economies of scale and scope can be identified as pro-competitive effects. Simply put, *economies of scale* are realized when the average cost of the producing firm falls as output is increased. Economy of scale applies to the output of a single product, but selling the two products tied together may actually increase demand for them both.<sup>22</sup> Selling two products tied together may also give rise to *economies of scope*. This means that a single firm producing both products, instead of producing them in separate firms, is more cost efficient. If the products are complementary this is especially true, since production of one in some cases is made easier by, or perhaps even dependent upon, the capacity to produce the other. For instance, producing car brake discs and brake blocks in the same firm may prove more efficient since the know-how of disc construction and production may prove useful in constructing and producing the blocks, or vice versa. Tying can help realize economies of scale and scope since the producer can then be confident to be able to sell both products.

Yet, there appear to be other more indirect, or subtle, efficiency gains from tying. These efficiencies could be found in the protection of goodwill and reputation of the firm, through the protection of, or improvement in, product quality.<sup>23</sup> Protecting quality could mean ensuring that the main product functions properly with its complements, usually consumables.

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<sup>19</sup> EAGCP Report 2005:30-1.

<sup>20</sup> Nalebuff 2003:78-82.

<sup>21</sup> Evans Evans & Salinger 2004:5.

<sup>22</sup> Ibid. p. 8.

<sup>23</sup> Nalebuff 2003:31-3.

Tying the purchase of the main product to the purchase of the consumables will naturally give the firm full control of what quality consumables are used. Still, ensuring that the right kind of consumables is used can be achieved in other perhaps less harsh ways. The machine producing firm could, for instance, provide consumable-producers with standards on the main product and the consumables to be used together with it, i.e. technical specifications and such.<sup>24</sup> However, a firm producing both products itself will certainly object to providing its competitors with such information and would probably argue that retaining *full* control means that its customers are better off. Also, in the case of certain consumables, which are characterized by being low-tech, neither retaining full control nor using standards is necessary.

Product quality may also concern product safety. Product malfunction may lead to physical injuries and as a consequence to liability questions. Trying to determine what caused the malfunction, the main product or the consumable, could prove a costly process. In such a case, producers will be likely to blame each other, which, in turn, may lead to costly litigation. Having a single firm produce the main product and the consumable, such situations would naturally be avoided. Also, knowing exactly where to turn in case of a malfunction, a customer may value such an integrated solution higher than being able to get cheaper consumables from other sources. As a consequence, being able to take full responsibility for the functionality and safety of its products, a firm's goodwill can be substantially increased.

The issue of quality and safety has become particularly apparent when it comes to warranties. Some producers may refuse to honor the main product's warranty if it is used with other products of, in their eyes, inferior quality. Courts are likely to target such practices, but if the main product firm can simply instill enough fear in its customers that the warranty *may* be void, then perhaps it could deter them from using other firms' consumables. Actual examples of this exist in the markets for printers and copying machines, where large producers like HP and Xerox have used such practices.<sup>25</sup>

These effects are pro-competitive because one firm benefiting from efficiency gains will force other firms to adapt and to compete even harder. That is, the result is increased competition, which *generally* will benefit consumers. However, judging from economic theory it is not certain how or even if the efficiency gains benefit the consumer. The fact that efficiency gains increase welfare is of course unquestionable, welfare being defined as the

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<sup>24</sup> Bork 1978:379-81.

<sup>25</sup> Nalebuff 2003:80-1

sum of producer surplus and consumer surplus. But welfare does not take into account transfers of surplus from one to the other. Thus, welfare can well increase even though consumer surplus is decreased. The most extreme point of view on the effect of tying on welfare is that of the Chicago-school, which states that it is in fact irrelevant, from a welfare point of view, what the relative changes in producer or consumer surplus are, as long as there is a positive net effect. Consequently, some economists argue that focus should be on deadweight loss, rather than transfers.<sup>26</sup>

Finally, in reference to efficiency gains, or pro-competitive effects, one can argue that tying can give rise to such effects, but that they are hard to identify and even harder to quantify. This may have a profound impact on the effect based approach, as discussed in the analysis chapter of this paper.

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<sup>26</sup> Martin 1988:403.

# 3. Competition Policy

## 3.1 Competition Policy: What and Why?

Competition is an integral part of the market economy. Through competition, firms are encouraged both to innovate and to make their activities more efficient, resulting, ultimately, in pushing down the prices. Under perfect competition firms are unable to act independently of each other, therefore making them price takers. Perfect competition, however, rests on a series of stringent assumptions, most of which are rarely present in the real world economy. Thus, most markets do not function under perfect competition, but in different states, ranging from near-perfect competition to no competition. Most firms operate in markets in between these extremes, either in competitive, oligopolistic or quasi-monopolistic markets. In many markets, the market structure depends on factors, such as product differentiation and natural entry barriers, which cannot be effected through the use of public policy. In other markets the market structure can be the direct effect of the behavior of firms and consequently can be targeted by policy instruments. By removing competition restricting activities, such markets can approach a state, not of perfect competition, but of workable competition.

Competition policy, or antitrust policy as it is also known, is “...the set of policies and laws which ensure that competition in the marketplace is not restricted in way that is detrimental to society”.<sup>27</sup> In other words, competition policy is vital to the promotion of economic performance and growth. Competition law, in turn, is the set legal rules by which the competition policy is implemented. As hinted above, competition policy has the goal of promoting competition, for instance by curbing the negative effects market power, ensuring a high level of economic efficiency and a maximum level of societal welfare.<sup>28</sup> With greater competition come higher incentives for firms to increase their production efficiency as well as to innovate, to differentiate their products and to raise quality. Increase in efficiency will in turn increase the welfare of the society. A loss of welfare occurs when a decrease in either producer or consumer surplus is not compensated by an increase in the other.<sup>29</sup> When using

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<sup>27</sup> Motta 2004:30.

<sup>28</sup> Ibid. p. 17 and Korah 2004:10.

<sup>29</sup> Motta 2004:18.

this definition, transfers between producer surplus and consumer surplus, as hinted earlier, are irrelevant when determining welfare losses or gains. Simply put the concept of welfare measures efficiency, not equality.<sup>30</sup> Still, albeit not mentioned explicitly in any of the main legal provisions of the European Community (EC), the Directorate-General for Competition's (DG Competition) mission statement hints that focus should rest on the welfare of the consumers. This is most likely also the general conception of the purpose of competition policy: to ensure that consumers are faced with fair prices and fair purchase conditions.

There are of course other goals for competition policy. These could include the protection of smaller firms, employment and environmental concerns as well as issues of even more political or social character. Finally, another objective of competition policy could be market integration.<sup>31</sup> This is especially true in the Community. Harmonized rules on competition across states could help facilitate the integration of their respective markets into one, single market. In the presence of such rules, national measures, which have either the objective or the effect of hindering trade or promoting national industry, can be targeted.

## 3.2 Competition Policy in the EC

### 3.2.1 General Principles and Goals

The goals of the Community's competition policy are found in article 2 of the Treaty of Rome (EC Treaty). The main goal is the creation of a common or internal market, the like of which is defined in article 14 as "...an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured..." These frontiers are barriers which restrict trade, directly or indirectly. Furthermore, article 2 calls for a harmonious, balanced and sustainable development of economic activities and a high degree of competitiveness and convergence of economic performance.

Article 3(g) specifies how the aforementioned goals are to be reached. Of primary interest is the establishment of a system ensuring that competition in the internal market is not distorted. It may be worthwhile to mention that article 3(t) also speaks of strengthening consumer protection, albeit without any special reference to competition.

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<sup>30</sup> Motta 2004:18.

<sup>31</sup> Ibid. p. 22-8 and Korah 2004:12-4.

### 3.2.2 Treaty Articles on Competition

The EC Treaty's rules on competition are found in articles 81 through 89. The two primary articles are article 81, which deals with collusion, and article 82 which deals with abuse of a dominant position. Not governed in the EC Treaty is the Community's policy on concentrations, which are instead targeted by the Merger Regulation.<sup>32</sup> This regulation prohibits concentrations, i.e. mergers, which may significantly impede effective competition.<sup>33</sup>

### 3.2.3 Article 82

Article 82 states that:

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

Following this main text is a list of potential abuses. This list is *non-exhaustive*, which means that other, non listed abuses can be targeted as well. Studying the article text the following four important parts can be extracted:

- Undertaking
- Dominant position
- Abuse
- May affect trade

The word undertaking, which is mentioned in article 81 as well, is not defined in either article. However, through literature and case law one can reach the conclusion that the word undertaking is a collection of resources, a natural or a legal person, engaged in some

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<sup>32</sup> Council Regulation (EC) No 139/2004.

<sup>33</sup> Ibid. paragraph 5.

economic activity, by supplying goods or services. This applies regardless whether the undertaking is private or public.<sup>34</sup> Throughout this paper I use the word “firm” as equivalent to undertaking.

The Treaty does not explain the word dominance. Instead, its meaning has been developed through case law, starting with the United Brands case. There the Court found that:

“The dominant position referred to in this article [82] relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately consumers”.<sup>35</sup>

The Court re-affirmed this view in the Hoffman-Laroche case, but added that the ability to prevent competition did not have to be fulfilled; simply that competition can be *sufficiently influenced*.<sup>36</sup> In the AKZO case, the Court added that a dominant position was such that the firm in question had the ability to eliminate or seriously weaken existing competition or to prevent market entry.<sup>37</sup> In its recent discussion paper, DG Competition has clarified its view on the concept of dominant position. It states that “...the definition of dominance consists of three elements...” these being economic strength on a market, the ability to prevent effective competition and the power to act independently. When all three elements are present, a firm enjoys substantial market power and is therefore considered to be dominant.<sup>38</sup> The question that needs to be answered after *defining* dominant position is in what market the firm is dominant. That is, the relevant market must be defined.

The relevant market has two dimensions, the product market and the geographical market. In order to define the relevant market as a whole, both product and geographical market must be defined. A more detailed description of how this is done will follow below.

A dominant position cannot in itself be punished under EC law.<sup>39</sup> The firm’s market position could be the result of, for instance, patents and/or efficient business practices.

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<sup>34</sup> Korah 2004:416 and Steiner & Woods 2003:405-6,436.

<sup>35</sup> United Brands paragraph 65.

<sup>36</sup> Hoffmann-La Roche paragraphs 38-9.

<sup>37</sup> AKZO paragraph 67.

<sup>38</sup> DG Competition Discussion paper paragraph 21-3.

<sup>39</sup> Motta 2004:35 and Korah 2004:121.

Instead, the court must evaluate whether the dominant firm is using its dominant position in a harmful, abusive manner. The concept of abuse under article 82 was defined in the Hoffman-Laroche case as a behavior which has the objective, or effect, of influencing the market structure, so that the degree of existing competition does not grow, or is maintained, but instead that it is weakened.<sup>40</sup>

There are many potential types of abuse, but these can generally be divided into two categories: *exploitative* abuse and *exclusionary* abuse. An example of the former is overpricing and of the latter predatory pricing. Under article 82, tying is explicitly listed as an exclusionary, or anti-competitive, abuse:

“...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.”

Judging from the wording of this paragraph, for tying to be an abuse, the tied product must have no connection with the contract, i.e. with the tying product. Were this true, tying of complementary products would be allowed, even under a dominant position. However, as will be discussed later, the court made a different assessment in the Tetra Pak II case. Also, two other points need to be made. Firstly, recall that the list of abuses under article 82 consists merely of examples and is non-exhaustive. Secondly even if there is no connection between the products, and even if the firm is dominant, tying can *potentially* still be allowed.<sup>41</sup> Consequently, there is, supposedly, no *explicit* per se ban of tying within the EC. The theory behind tying has been discussed earlier, but it may be worthwhile to add that tying, as an anti-competitive, exclusionary behavior, is similar to predation. Costs of this behavior could either be recouped in the future as is the case with predatory pricing, or from the monopoly profits, or near-monopoly profits, in the tying market. As we will see in the Tetra Pak II case, the Commission claimed that even a different, but adjacent, market could allow recuperation.

For article 82 to be applicable the dominant firm's behavior must in some way affect trade within the Community or, at the very least, that it *may* do so. It is generally not hard to establish this theoretical effect, making behavior even within a single Community state

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<sup>40</sup> Hoffmann-La Roche paragraph 91.

<sup>41</sup> Commission Notice: *Guidelines on Vertical Restraints* and Korah 2004:140.

potentially subject to review under article 82.<sup>42</sup> In 2004, the Commission issued a notice with guidelines on the concept of effects on trade.<sup>43</sup> The notice outlines the three key elements, or concepts, of the Community trade effect: the concept “Community trade”, the concept of “may affect” and finally the concept of “appreciability”. The first deals with cross-boarder economic activity, the second with discernable, probable effects and the third with the *ability* of the behavior to have an impact on trade.<sup>44</sup>

### 3.3 Implementing Article 82

The implementation of article 82 is governed by Regulations 1/2003<sup>45</sup> and 773/2004<sup>46</sup>. Furthermore, defining relevant market, a highly integral part of assessing article 82 cases, is since 1997 guided by a Commission Notice.<sup>47</sup>

#### 3.3.1 General Procedure

The Commission can either, through Regulation 1/2003, initiate investigations on its own or following a complaint filed by a third party. The Commission, after investigating the matter, a process which could take several years, eventually reaches a decision. The decision contains the investigation, the firm’s response, the appraisal of the case and finally the penalties. A failure to reach a decision can be challenged through article 232 of the Treaty. If a decision is reached, it can be challenged through article 230. The matter is then subject to appraisal of the Court of First Instance (CFI). Its judgment can also be challenged, again through article 230, by which the case is passed on to the European Court of Justice (ECJ) for a final judgment.<sup>48</sup>

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<sup>42</sup> Steiner & Woods 2003:452.

<sup>43</sup> Commission Notice: *Guidelines on the Effect on Trade Concept*

<sup>44</sup> Ibid. paragraphs 19, 23, 47.

<sup>45</sup> Council Regulation (EC) No 1/2003

<sup>46</sup> Council Regulation (EC) No 773/2004

<sup>47</sup> Commission Notice on the Definition of the Relevant Market

<sup>48</sup> Steiner & Woods 2003:40 and Korah 2004:23-7.

### 3.3.2 Relevant Market Definition

As previously mentioned, the process of how the relevant market is defined can be found in a Commission Notice. It is important to remember that the Notice, unlike the Treaty articles and the regulations, does not carry any legally binding effects. It does, however, provide understanding of how the Commission goes about defining the relevant market. As briefly addressed under the dominance section, the relevant market has two dimensions:

- Relevant Product Market (RPM) and
- Relevant Geographical Market (RGM)

The relevant product market is defined by the Notice:

“A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use”.<sup>49</sup>

How broadly, or narrowly the relevant product market is defined is of utmost importance. Naturally, the narrower the product market, the greater the possibility for dominance.

The relevant geographical market is defined as:

“...the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighboring areas because the conditions of competition are appreciably different in those area”.<sup>50</sup>

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<sup>49</sup> Commission Notice on the Definition of the Relevant Market paragraph 7.

<sup>50</sup> Commission Notice on the Definition of the Relevant Market paragraph 8.

The basic principles behind market definition are demand substitution and supply substitution.<sup>51</sup> Determining demand substitution entails looking at what products are viewed, by consumers, as viable and acceptable substitutes.<sup>52</sup> To find such products, the cross-elasticity of demand is examined. That is, attempting to determine what impact a small change in price of one product has on the quantity demanded of another. If an increase in price of good A results in a decrease in demand for good B, the two goods are complements. But, on the other hand, if demand for good B increases when the price of good A increases, the goods are substitutes. Essentially, demand substitution revolves around the ability for the consumer to find alternative sources of supply. These sources may in some cases be found in other geographical areas, hence the geographical dimension of the relevant market.

In cases where there are no viable substitutes on the market, it is important to examine to what extent other firms can shift their production towards producing such substitutes.<sup>53</sup> This is supply substitution, which is determined by examining the cross-elasticity of supply. The ability to shift production varies substantially across different markets. In some industries production can be shifted almost instantaneously, while in other markets shifting production can be either very difficult or sometimes practically impossible. This may be particularly so if there are substantial fixed costs involved.<sup>54</sup> As a tool to determine the relevant market, competition agencies are using the Small but Significant Non-transitory Increase in Prices (SSNIP) test.<sup>55</sup>

### 3.3.3 Market Shares and Dominance

After defining the relevant market, comes the task of determining whether the firm holds a dominant position in that market. This is done by examining the firm's market share. Article 82 provides no thresholds for what market shares constitute dominance. Instead, this has been established through case law.

In reference to market shares it must be pointed out that these must have been held over some period of time. Market shares can be high in the short term for a variety of reasons, e.g.

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<sup>51</sup> Ibid. paragraph 13.

<sup>52</sup> Ibid. paragraph 15 and Steiner & Woods 2003:438.

<sup>53</sup> Steiner & Woods 2003:438.

<sup>54</sup> Korah 2004:98-9.

<sup>55</sup> For more on this test, see Commission Notice on the Definition of the Relevant Market paragraphs 17-8, 39-41 and Motta 2004:102-3 and Korah 2004:98.

emerging markets where enough firms have not entered yet, but where entry could take place in the longer term. Firms that hold very high market shares, well over 50 %, perhaps even in the range of 80-90 %, are considered dominant.<sup>56</sup> A firm holding a market share of 50 % or more of the relevant market that firm is generally perceived to be dominant. This however depends on the market structure, i.e. the market shares and financial strength of the firm's competitors.<sup>57</sup> For market shares below 50 % market structure becomes an even more important factor. Generally, a firm which holds 40-50 % of the market is regarded as dominant, particularly if the gap to the competitors' market shares is substantial. For example, a firm with a 40 % market share can be considered dominant, if none of its competitors, individually, have a market share of more than 10-15 %.<sup>58</sup>

Even firms holding less than 40 % of the market can be considered dominant. Yet, this only applies if there are other substantial factors present. One such important factor is the possibility of market entry. Other factors were mentioned in the Hoffman-Laroche case, such as the relative strength of the firm, primarily in reference to its technological advantage and distribution system.<sup>59</sup> Less than a 25 % market share cannot constitute dominance.

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<sup>56</sup> Hoffmann-La Roche paragraph 41 Steiner & Woods 2003:444.

<sup>57</sup> AKZO paragraphs 59-61 and Korah 2004:109.

<sup>58</sup> United Brands paragraphs 108-9 and Steiner & Woods 2003:444 and DG Competition Discussion paper paragraph 30.

<sup>59</sup> DG Competition Discussion paper paragraph 31 Hoffmann-La Roche paragraph 42.

## 4. The Tetra Pak II case

In September 1983 Elopak Italia filed a complaint to the European Commission. According to Elopak, its rival Tetra Pak was trying to oust Elopak from the Italian milk packaging market through abusive, exclusionary practices.<sup>60</sup> Following the complaint, the Commission conducted an investigation into the alleged conduct, finally reaching a decision in the case on 24 July 1991. Tetra Pak appealed this decision to the CFI and consequently also the appraisal of this court, sending the case to the ECJ for a final judgment. However, both of Tetra Pak's appeals were dismissed by the courts. The Commission's decision was thus upheld, which leads me to focus exclusively on that decision.

### 4.1 Industry

Tetra Pak is active in the business of providing equipment for packaging of liquid and semi-liquid foods. Liquid and semi-liquid foods, for instance milk, fruit juice, wine, water and soup, can be packaged in a variety of different shapes and materials. The materials most commonly used are paper carton, plastics, glass and aluminium. Carton, Tetra Pak's primary material at the time of the case, can be used for packaging a wide range of liquid or semi-liquid foods. However, it was originally intended for dairy products, primarily milk and cream. It has proven exceptionally successful for packaging these products and also fruit juice, making carton the most commonly used material for these foods.

The liquid most commonly packed in Tetra Pak cartons is milk. Milk can be divided into two categories: fresh milk and UHT-milk. The former is usually pasteurized, whereas the latter is sterilized. Sterilization is achieved by briefly heating the milk to an ultra high temperature (UHT) under aseptic conditions. This process prolongs the expiration time of the milk and also allows for it to be stored in a non-refrigerated environment.<sup>61</sup> UHT-milk cannot be packaged in the same type of cartons as fresh milk, since the UHT-milk, once sterilized,

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<sup>60</sup> Tetra Pak II - Commission Decision paragraph 5.

<sup>61</sup> Ibid. paragraph 8.

must remain in a sterile environment until opened and consumed. Consequently, milk can be packaged by two methods: non-aseptic for fresh milk and aseptic for UHT-milk.

#### 4.1.1 Non-Aseptic Packaging

Non-aseptic packaging is a comparatively simple process. In the past, fresh milk was generally sold in glass bottles. These were consumer friendly, but involved high costs of both production and filling. In response to this, during the 1950ies, Tetra Pak developed a technique for packaging milk in paper carton, using a continuous forming, filling and sealing process (form-fill-seal). The cost savings of this technology were substantial, with the milk still being contained in a relatively consumer friendly packaging. In 1963 Tetra Pak introduced its brick shaped cartons, called the Tetra Brik, which are still used today. These, however, have been gradually replaced by so called gable-top cartons. Tetra Rex is Tetra Pak's gable-top variant, facing competition primarily from Elopak's Pure Pak carton.<sup>62</sup>

#### 4.1.2 Aseptic Packaging

Aseptic packaging is a more complicated process, indicated by the presence of practically only two producers: Tetra Pak and PKL. Tetra Pak first developed its aseptic technology for its Brik carton, which turned out to be highly suitable for both non-aseptic and aseptic packaging. Tetra Pak's aseptic technology involves sterilizing the cartons by soaking them in hydrogen peroxide, before the form-fill-seal process. The whole process of sterilization and form-fill-seal takes place in the machine, which acts as a closed, aseptic system.<sup>63</sup> Although carton is the most commonly used material for aseptic packaging, glass and plastic materials can be used as well, but of course require different technologies for both sterilization and form-fill-seal.

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<sup>62</sup> Tetra Pak II - Commission Decision paragraph 15.

<sup>63</sup> Ibid. paragraph 14.

## 4.2 Markets

In the eyes of the Commission, the two different markets for packaging liquids and semi-liquids consist of four separate markets. Firstly, the two markets for non-aseptic packaging, i.e. the two separate, but linked, markets for non-aseptic machines and its corresponding market for non-aseptic cartons. Secondly, the two separate markets for aseptic machines and aseptic cartons.<sup>64</sup>

### 4.2.1 Definition of Relevant Markets

The Commission's definition of the relevant market closely followed the definition reached in the Tetra Pak I case. By virtue of being a distinct product, which cannot be easily substituted, milk was deemed the relevant product.

The Commission claimed that the "conceived packaging market", i.e. the market consisting of all types of materials and methods of packaging of liquid and semi-liquid foods, was not the relevant market. The Commission supported this statement by pointing out that the different types of materials and methods compete only in the long term, whereas low short and medium term elasticities of substitution indicate that there is no such competition in the shorter term.<sup>65</sup> Looking at only the short term was motivated, according to the Commission, by stable short term consumer preferences regarding the shape and material of the packaging. The thereof resulting low elasticity of demand substitution in combination with the costs of shifting production makes the elasticity of supply substitution low as well. Technological advances and/or changed consumer preferences may raise the elasticity of substitution, but not in the short term. Technological advances require time and cost-consuming research and development, and consumer preferences cannot be affected by a firm in the short term, a fact which has been acknowledged by Tetra Pak.<sup>66</sup>

Consequently, the Commission found that milk packaged in cartons was the relevant product market. The Commission then went on to further narrow this market definition, by separating non-aseptic fresh milk from aseptic UHT-milk. In the Tetra Pak I case, the

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<sup>64</sup> Tetra Pak II - Commission Decision paragraph 11.

<sup>65</sup> Ibid. paragraph 93.

<sup>66</sup> Ibid. paragraphs 93-6.

Commission stated that consumers do not readily substitute between fresh milk and UHT-milk, making the elasticity of demand substitution almost zero. Also, the elasticity of supply substitution was low, since producers of non-aseptic machines could not easily enter the market for aseptic machines.<sup>67</sup> Thus, by deciding to look at the short term and due to the low elasticity of demand and supply substitution for both packing materials and the packaged product, the Commission reached a relevant product market definition of:

1. Non-aseptic machines for fresh milk
2. Cartons for non-aseptic machines
3. Aseptic machines for UHT-milk
4. Cartons for aseptic machines

For sake of convenience, I will refer to the first two as the non-aseptic market and the other two as the aseptic market.

The relevant geographic market consisted of the Community as a whole. This definition also followed that of the Tetra Pak I case. The Commission admitted that there were in fact differences in demand for both milk and types of packaging between Member States, but that these were not due to price differences. Furthermore, transportation costs, which may confine the RGM to a certain country or region, were not sufficiently high in the case for milk packaging machines.<sup>68</sup>

#### 4.2.2 Market Structure and Entry

Tetra Pak is active in all four of the relevant product markets. Using the Commission's definition of the relevant markets, Tetra Pak held in 1985 a market share of 50 % of the non-aseptic market, with Elopak second at 27 % and PKL third at 11 %.<sup>69</sup> The remaining 12 % was divided among several smaller producers, none of which individually exceeded a market

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<sup>67</sup> Tetra Pak II - Commission Decision paragraph 9 and Tetra Pak I - Commission Decision paragraph 30.

<sup>68</sup> Tetra Pak II - Commission Decision paragraph 98 and Tetra Pak I - Commission Decision paragraphs 39-41.

<sup>69</sup> Tetra Pak II - Commission Decision paragraph 101.

share of 10 %. With only three major producers, the non-aseptic market was oligopolistic.<sup>70</sup> Tetra Pak, due to its market share could be considered dominant on this market.<sup>71</sup>

On the aseptic market, Tetra Pak held in 1985 a market share of 90 %. PKL thus held a market share of 10 %. Tetra Pak, by virtue of being almost monopolistic, was deemed dominant in this market.<sup>72</sup> Although Tetra Pak could have been regarded as dominant in both markets, the Commission chose to look only at the aseptic market. The Commission argued that Tetra Pak used this dominance in the non-aseptic market, creating a “horizontal transfer of market power”.<sup>73</sup>

The possibility of entry into these markets differs substantially. For technological reasons, further enhanced by aggressive patent policies, entry into the aseptic market is far more difficult than entry into the non-aseptic market, even in the absence of anti-competitive behavior.<sup>74</sup> Presence in the non-aseptic market hardly guarantees the ability to enter the aseptic market. Elopak had for a number of years prior to the Commission’s decision attempted to enter the aseptic market, but without success.<sup>75</sup> However, presence in the aseptic market enables entry into the non-aseptic, since virtually all technology needed, i.e. the form-fill-seal process, is already present in the aseptic market. Naturally, entering the markets for machines is generally more difficult than entering the markets for cartons.

Responding to the aforementioned findings, Tetra Pak claimed that the Commission’s definition of the RPM was inaccurate. Instead, it should consist of all types of packaging materials, not just carton, and for all types of liquid foods, not just milk. Such a market definition would give Tetra Pak a market share of about 14 %, i.e. far below the dominance thresholds discussed in the competition policy chapter. This was immediately dismissed by the Commission, which held that such a market definition would only consider the possibility of technical substitution, not whether this is economically viable.<sup>76</sup>

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<sup>70</sup> Tetra Pak II - Commission Decision paragraph 13.

<sup>71</sup> Ibid. paragraphs 101, 104.

<sup>72</sup> Ibid. paragraph 100.

<sup>73</sup> Gacía-Gallego & Georgantzís 1999:138.

<sup>74</sup> Tetra Pak II - Commission Decision paragraph 18.

<sup>75</sup> Ibid. paragraph 104.

<sup>76</sup> Ibid. paragraph 103.

### 4.3 Market Behavior – Tying

Tetra Pak’s allegedly anti- focused primarily on three different practices: predatory pricing, exclusion through acquisition of actual and potential competitors, and tying.<sup>77</sup> I will focus exclusively on tying, but it is important to note that the outcome of the case was highly influenced by the other practices.

The Commission found in its investigation that Tetra Pak was selling or leasing its machines coupled with a number of contractual obligations. The tying strategy employed by Tetra Pak was one such obligation and it had several dimensions. Most importantly, the sale or lease of the machine was tied to the purchase of cartons from Tetra Pak. This tie was achieved by Tetra Pak first requiring its customer to use only Tetra Pak cartons in Tetra Pak machines and then by only allowing the customer to obtain supplies from Tetra Pak itself.<sup>78</sup> Consequently, Tetra Pak was able to ensure both that only Tetra Pak cartons were used and that these were not obtained through other sources, e.g. parallel imports. Tetra Pak also tied its machine sale/lease to an exclusive right to provide maintenance and repair services, effectively barring other firms specializing in providing such services. The exclusive right to supply spare parts was also reserved for Tetra Pak.<sup>79</sup> The Commission held that this behavior created an “artificial and unjustified” link between Tetra Pak and its customers. The Commission also stated that using tied sales in such a manner was a violation of article 82, since the obligations had no connection to the purpose of the contract itself, i.e. selling or leasing machines.<sup>80</sup>

It is important to note that the behavior, tying, took place in the non-aseptic market, but that the dominant position was held in the aseptic market. However, the Commission argued that the close link between these markets made it of no consequence where the abuse took place. That is, abuse in one market could stem from dominance in a neighboring market, producing the aforementioned horizontal transfer of dominance.<sup>81</sup>

In its defense, Tetra Pak held that the firm sold integrated packaging systems, consisting of know-how, equipment, containers and training, rather than being a supplier of these individually. Tetra Pak attempted to justify tying these products together in a system by

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<sup>77</sup> Tetra Pak II - Commission Decision paragraph 5.

<sup>78</sup> Ibid. paragraphs 115-6.

<sup>79</sup> Ibid. paragraphs 107-9.

<sup>80</sup> Ibid. paragraphs 104, 117.

<sup>81</sup> Ibid. paragraph 104.

citing primarily four reasons: economies of scale and cost savings, technical considerations, product liability and health, and protection of reputation. In reference to economies of scale and cost savings, little can be said, since Tetra Pak never provided the Commission with any concrete evidence of this.

Regarding the technical considerations, Tetra Pak argued that the cartons, due to the complexity of the machines, must be designed specifically for these, i.e. there is a “natural link” between machines and cartons. The arguments of product liability and health are connected to the technical reasons. If Tetra Pak were to be the sole provider of cartons for the machines, Tetra Pak could ensure the quality of the products, or the functioning of the machines. This essentially deals with the difficulties of how responsibility is to be divided if the machine malfunctions. Having a single supplier would be beneficial to the customer, since it would then know exactly where to turn. On the same note, Tetra Pak argued that only a sole supplier could ensure that potentially harmful effects on public health are prevented. Finally, Tetra Pak also argued that in order to protect its reputation, it must be able to ensure the proper functioning of its machines, which in turn only could be ensured when Tetra Pak was the sole provider of cartons.<sup>82</sup>

In response to Tetra Pak’s defense, the Commission first addressed the issue of technical reasons for tying. The Commission simply argued that if there were indeed technical reasons for only using Tetra Pak cartons on Tetra Pak’s machines, there would be no need for a contractual obligation, as there would then essentially be a technical tie. In reference to the gains from economies of scale, the Commission pointed out that if there were indeed such gains to be extracted, for both producer and customer, from using integrated systems, there would be no need for tying since the customer would request the system without being coerced. Ensuring the proper functioning of the machine could be accomplished by other, for the purpose more proportionate, means than tying. These could include, according to the Commission, providing technical standards for machines and cartons.<sup>83</sup>

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<sup>82</sup> Tetra Pak II - Commission Decision paragraph 118.

<sup>83</sup> Ibid. paragraph 119.

## 4.4 Decision and Final Appraisal

The Commission reached the decision that Tetra Pak, being an undertaking in a dominant position on the aseptic market, was abusing this dominance in the non-aseptic market. In particular reference to tying, the Commission stated that Tetra Pak's "...contractual clauses were aimed at unduly binding [customers] to Tetra Pak and at artificially eliminating potential competition..."<sup>84</sup>

The Commission thus held that Tetra Pak's behavior was an infringement of article 82 and imposed a fine of ECU 75 million and an obligation to end the infringements.<sup>85</sup> Both the CFI and the ECJ fully upheld this decision, but it is noteworthy that the ECJ expanded on the issue of the "natural link" between machines and cartons. The court held that proving that such a link existed would not automatically make article 82 inapplicable, as the list of abuses in that article is not exhaustive.<sup>86</sup> Also note that the substantial fine covered all the abuses, not just tying.

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<sup>84</sup> Tetra Pak II - Commission Decision paragraph 170.

<sup>85</sup> Ibid. articles 1-3

<sup>86</sup> Tetra Pak II – ECJ paragraph 37.

## 5. Analysis

For the analysis I have chosen to look at the, among economists, growing sentiment in support of a more economic assessment of article 82 cases. This sentiment can be traced to recent, influential economic articles as well as reports from, and a discussion by, the Commission. Consequently, this chapter will consist of two parts. First a description of this new economic effect based approach, accompanied by comments of my own. This is then followed by a section where I attempt to look at the implications of such an approach for the Tetra Pak II case, and in doing so trying to determine differences and difficulties. In addition to this I will also assess whether the case could have, or perhaps even should have, had a different outcome under an effect based approach.

### 5.1 Form Based and Effect Based Approaches

The Tetra Pak II case clearly illustrates the Commission's use of a so called "form based" approach. The essential steps in a form based approach are first to establish the existence of a dominant position in the relevant market, followed by the assertion that the dominant firm is guilty of an anti-competitive behavior.<sup>87</sup> As has been shown in the previous chapter, this was precisely the course of action taken by the Commission in the Tetra Pak II case.

In a report by the Economic Advisory Group for Competition Policy (EAGCP), ordered by the Commission in conjunction with its discussion on a future review of article 82, several influential economists push for a move away from the form based approach towards an effect based approach. Such an approach focuses on the behavior's effects on the market, not on the behavior itself. Shifting focus this way has two advantages. Firstly, outlining exactly what behaviors would not be allowed runs the risk of firms using other practices, which have not yet been listed as illegal, but which have the same effects on the market. Yet, providing only a non-exhaustive list decreases the ability of a firm to know beforehand if a certain practice is tolerated. Secondly, an effect based approach would allow the weighing of anti-competitive

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<sup>87</sup> EAGCP Report 2005:12-3.

effects against pro-competitive effects, in order to establish whether there is a net effect of competitive harm.<sup>88</sup>

A shift towards an effect based approach also bears with it a shift of focus regarding the perceived goal of competition policy. Looking at effects, i.e. the competitive harm, focus automatically shifts from preservation of market structure to consumer welfare.<sup>89</sup> In essence, this would mean that competition policy now primarily would serve, not so much as to protect competitors, as to protect consumers, which, in my view, is the primary purpose of competition policy in the first place.

Using an effect based approach naturally changes the court procedure of an article 82 case. The competition authority, e.g. the Commission, would not have to establish the existence of a dominant position, since the existence of anti-competitive effects alone indicates dominance. Simply put, only a dominant firm can inflict such anti-competitive effects.<sup>90</sup> Instead, the competition authority would bear the burden of proving the existence of such effects. The Commission would also have to connect any such effects with relevant economic theory. The firm would then respond by having to prove, also based on economic theory, the existence of pro-competitive effects and how these are passed on to the consumer.<sup>91</sup> Ultimately, it would be for the court to weigh these arguments against each other.

However, here is where the first major difficulty is encountered: in the EC the Commission serves as both competition authority and court. A bizarre situation would arise, where the Commission is to reach a decision based on weighing its own arguments against those of the firm. Admittedly this is already the case, but under the form based approach weighing the arguments against each other is of less consequence once a perceived abuse has been observed. Yet, as the name implies, under an effect based approach, weighing the arguments is absolutely essential. This could potentially put the Commission in an awkward, biased and even challengeable position. This could perhaps even force a change in the Community's general procedure for trying competition cases, where the CFI, and not the Commission, would then truly be the first instance. There are other difficulties associated with shifting to an effect based approach, such as concerns about predictability and costs of the proceedings, but these obstacles are, according to the EAGCP, surmountable and the cost and hassle outweighed by the potential gains from such an approach.

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<sup>88</sup> EAGCP Report 2005:2.

<sup>89</sup> Ibid. p. 8.

<sup>90</sup> Ibid. p. 14.

<sup>91</sup> Ibid. p. 4, 8, 14-6.

The existence of pro-competitive effects, particularly those listed in the theory chapter of this paper, of certain market behaviors have been acknowledged by both the EAGCP and the Commission.<sup>92</sup> The EAGCP also raises the issue that a certain market behavior can give rise to both anti-competitive and pro-competitive effects, possibly even simultaneously.<sup>93</sup> This makes the task of weighing these in the same scale even more crucial. Tying is perhaps the best example of such market behavior. I believe that the current, form based approach towards tying, by virtue of being an article 82 abuse, greatly suppresses the potential gains that stem from this behavior. Selling integrated systems, by tying complementary products together, should not automatically be regarded as an anti-competitive abuse, when it, under certain circumstances in fact can be regarded as what the EAGCP describes as “legitimate competitive behavior”.<sup>94</sup> Perhaps can an effect based approach better distinguish between the two, which leads us to the final section of this paper: the implications of applying an effect approach to the Tetra Pak II case.

## 5.2 Effect Based Approach in the Tetra Pak II Case

I have identified two major areas of interest regarding the use of an effect based approach in the Tetra Pak II case: Firstly, the impact on the definition of the relevant market and assertion of dominance on that market and, secondly, the impact on the burden of proof of the parties, that is, how or even if the effects of tying can be proven.

### 5.2.1 Dominance

The Tetra Pak II case clearly illustrates the importance, and inherent difficulties, of establishing the existence of a dominant position. Much of the Commission’s decision revolves around establishing Tetra Pak’s dominance, whose appeal in turn to a great extent involves refuting this claim. This is an indication of the importance of dominance under a form based approach. Yet, the Tetra Pak II case also illustrates substantial problems involved

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<sup>92</sup> EAGCP Report 2005:13,40-1 and DG Competition Discussion Paper paragraphs 204-6.

<sup>93</sup> EAGCP Report 2005:13.

<sup>94</sup> Ibid.

with this approach. For instance, albeit speculation, one can suspect that Tetra Pak's strong dominant position, i.e. 90 % of the aseptic market, had a substantial influence on the perceived severity of the alleged abuses. In other words, the strong dominant position was in itself seen as proof of anti-competitive behavior. Such a notion can never be accepted and it is particularly troublesome in the Tetra Pak II case, since Tetra Pak's dominance in the aseptic market must be attributed to innovation and clever, but not anti-competitive, business strategies. Still, shifting to an effect based approach does not mean that the difficult and time consuming process of market definition can be avoided altogether. A proper market definition is still important in order to know which market should be investigated for pro- and anti-competitive effects. Under an effect based approach, market definition may prove more of a helpful tool than a formal step.

The Commission pointing to Tetra Pak's dominance in an adjacent market is problematic. First the Commission chose a market definition where the aseptic market was not included in the relevant market where the alleged abuses took place. Then the Commission backtracked slightly, claiming that the aseptic market was so closely related, though not a part of, the non-aseptic market. Therefore, the Commission held that a horizontal transfer of dominance had taken place in that Tetra Pak was abusing its aseptic market dominance on the non-aseptic market. The problem here is that the traditional view in the leverage theory on tying is that the firm uses its dominance in the tying product market in order to establish dominance in the tied product market. The theory does not appear to consider the aforementioned situation, the horizontal transfer of dominance. In reference to this, an effect based approach would have two different impacts. It would be very difficult for the Commission to prove that there indeed was an attempt of the firm to establish dominance in the tied product market, since this proof would have to be supported by the far from consistent leverage theory.

However, under an effect based approach it is not relevant on what market the firm holds a dominant position. As mentioned before, if the firm is able to create anti-competitive effects resulting in competitive harm on a market, it is either dominant on that market or on a market which is sufficiently adjacent to the market where the effects appear. As a consequence, the aforementioned difficulty which the Commission faces regarding the leverage theory, along with the whole discussion on whether a transfer of dominance is plausible becomes more or less irrelevant.

## 5.2.2 Other Implications

The first key element needed for successfully applying an effect based approach is separating, or isolating, the different types of practices, i.e. the behaviors of the firm. This is particularly important in the Tetra Pak II case. As have been mentioned in the previous chapter, Tetra Pak was accused of at least three different types of potentially anti-competitive practices. Separating these practices from each other, examining their respective effects on the market may have proved very difficult but nonetheless vital. Bunching different practices together, which one can argue has been done by the Commission in the Tetra Pak II case, would only add to the risk of failing to identify potential pro-competitive gains of some practices. These may actually outweigh the anti-competitive effects of other practices. In the presence of practices where the anti-competitive effects are greater, the market could display a net effect of competitive harm, even though the extent of which may be dampened by another practice's pro-competitive effects..

In the Tetra Pak II case, the Commission at least seemingly dealt with the different practices separately. Yet, one cannot claim that this was equal to examining the practices in isolation of each other, since the Commission did not offer any opinion on which of the practices contributed the bulk of the competitive harm. It was sufficient for the Commission to point out the potential, or theoretical, anti-competitive effects of tying in order to add that practice to the list of abuses, thus completely disregarding any pro-competitive gains. Starting with effects, both anti-competitive and pro-competitive, this problem could have been alleviated. Again, this is important in the Tetra Pak II case, where one may suspect that the final decision was primarily influenced by the practice of predatory pricing, rather than tying.

The Commission would under an effect based approach have had to prove that tying had anti-competitive effects on the market or, alternatively, that observed anti-competitive effects could have been ascribed to tying. The effect that should have been proven is essentially exclusion through market power leverage, i.e. foreclosure. As touched upon in the theory chapter, the Commission also regards price discrimination as anti-competitive<sup>95</sup>, but this view can hardly be sufficiently supported by economic theory. Therefore, the Commission should be careful when citing price discrimination as anti-competitive, instead

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<sup>95</sup> DG Competition Discussion Paper paragraph 179.

focusing on foreclosure. More precisely put, price discrimination may be easy to identify on a market, but proving the anti-competitive effects thereof may not.

Foreclosure, however, can be difficult to prove at all. The key here is what was discussed in the theory chapter, i.e. the two potential reasons for a leveraging market power: protecting a dominant position in one market or establishing/maintaining a dominant position in an adjacent market. Proving that Tetra Pak was protecting its dominant position in the aseptic market would have been very difficult. The main arguments here are twofold. Firstly, this market was already well protected from entry by technological barriers. Tetra Pak's aseptic technique was, at the time, covered by patents, thus forcing potential entrants to develop their own technology. Secondly, for basically the same reasons, a firm being present in the non-aseptic market does not by any means guarantee that firm entry into the aseptic market, which in turn would reduce the incentive to protect that market by ousting competitors from the non-aseptic market. Therefore, one can legitimately ask why Tetra Pak would employ a risky anti-competitive strategy, which was unnecessary in the first place?

Consequently, Tetra Pak establishing or maintaining a dominant position in the non-aseptic market would seem a more plausible explanation. Yet this may also be difficult to prove. The reasoning here is essentially the opposite to that of the aseptic market. Entry into the non-aseptic market is substantially easier, due to the technological requirements. A strategy aimed at ousting competitors from a market would have to be accompanied by an assurance that the ousted firms cannot easily reenter the market. If market entry is easy, the strategy would simply not pay off. In the Tetra Pak case, firms producing only cartons may be hurt, since these would be forced to enter the machine market as well. But this is really not relevant to the Tetra Pak II case, since the firm filing the complaint, Elopak, was active in both machine and carton markets. Therefore Elopak could have responded with a tying strategy of its own. Elopak could fairly easily have adjusted to Tetra Pak's tying strategy, which then could be regarded as more of an expression of legitimate competition, than of anti-competitive behavior. Either way, the mere notion that Elopak was hurt by Tetra Pak's tying strategy would simply not be enough, since the focus of an effect based approach is the harm inflicted on consumers, not on competitors.

If the Commission nevertheless had successfully managed to prove the existence of anti-competitive effects which hurt consumers, it would not have been for Tetra Pak to refute any such effects. Instead, Tetra Pak would have had to provide evidence of pro-competitive effects, preferably the size of which would fully counteract the anti-competitive effects. This

would mean that Tetra Pak would have been forced to quantify the effects, or, as it may turn out, potential future effects. For obvious reasons this is extraordinarily difficult. And as if this was not difficult enough, Tetra Pak would also have had to provide evidence on how these effects, or gains, would be passed on to the consumers. Thus, Tetra Pak would have had to show the existence of the effects, as well as the size and distribution, all of which with references to economic theory.

In the actual Tetra Pak II case, Tetra Pak did in fact point to pro-competitive effects, even though this very terminology was not used. As mentioned earlier, these effects were, for instance, efficiency gains in the form of economies of scale and other cost savings. What Tetra Pak failed to do was to provide a detailed account of how large these effects were and how their existence was dependent on the use of tying. Yet, it is questionable whether the outcome of the case would have been different had Tetra Pak indeed been able to provide such evidence, since the form based approach focus so completely on dominance, behavior and abuse. Objectively justifying a behavior which is already deemed an abuse must be regarded as virtually an impossible task, but a task that Tetra Pak did in fact face. The very essence of the effect bases approach is that there is no abuse, unless it has been proven that the anti-competitive effects outweigh the pro-competitive.

The effect based approach would probably have made Tetra Pak worse off in terms of costs of providing evidence, but at least the firm would have had a far greater chance of having its arguments properly weighed. In the actual case, Tetra Pak's efficiency arguments were quickly brushed aside by the Commission partly, of course, due to lack of evidence, but also since the Commission really did not have a reason to take such arguments into account. The mere notion that tying *could* have anti-competitive effects, accompanied by the fact that tying being explicitly listed in article 82 as an abuse was sufficient. An effects based approach would of course not change the latter, but it would certainly affect how severe an offense it is perceived to be.

## 5.3 Conclusions

It is impossible to assess, with any degree of certainty, exactly how the outcome would have been, had an effect based approach been used in the Tetra Pak II case. However, one can

argue that the outcome would have been somewhat different had tying been dealt with separately and under an effect based approach. The main argument to support this is that tying can indeed have both anti-competitive effects and pro-competitive effects, a notion which was overlooked in the form based approach of the case. Also, mentioned earlier, the actual Tetra Pak II case leaves one with a suspicion that it was not consumers that were protected from competitive harm, but in fact Tetra Pak's competitors. Although competitors being hurt can result in consumers being hurt too, it must be stressed that this is not automatically the case.

An effect based approach would also bear with it another desirable effect: removing the need for a debate around whether there are natural links between the tying product and the tied product. As previously mentioned, the ECJ found in the Tetra Pak II case that tying *could* be an abuse, even in the presence of such links. This has essentially resulted in the provision of systems, consisted of complementary products integrated through tying, virtually illegal, at least for a firm holding a dominant position either in the tying market or a separate, but adjacent market. If one does not wish to draw such an extensive conclusion, one can, at the very least, argue that the predictability of what constitutes illegal tying has been greatly decreased. This is problematic since it can be argued that many firms do in fact strive towards using tying, in order to provide integrated systems. Since firms lacking market powers also seem to wish to provide such systems, it is obvious that the motives behind doing so cannot be merely anti-competitive. Either the customer requests such a system or the firm refuses to break down its product any further.<sup>96</sup>

Of course, a dominant firm has some additional responsibility when choosing its business strategies. But refraining from using tying should not be one such responsibility. Particularly not so under an effect based approach. It would serve as a safeguard, determining whether the use of tying by the dominant firm is anti-competitive or if it is simply a legitimate competitive behavior. It is conceivable that *some* cases of tying, even by dominant firms, do not display sufficient anti-competitive effects, therefore, under an effect based approach, allowing the continued use of the tying in these cases. I believe that the Tetra Pak II case was one such case.

Therefore, in conclusion, the Tetra Pak II case should have been dealt with under an effect based approach, which quite feasibly could have resulted in a different outcome, at the very least in the appraisal of the practice of tying.

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<sup>96</sup> Bork 1978:378-9.

# References

## Articles

Carlton, Dennis - Waldman, Michael, 2000. "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries".

Choi, Jay Pil, 2004. "Antitrust Analysis of Tying Arrangements", CESifo Working Paper No. 1336.

Evans, David S. - Salinger, Michael, 2004. "Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law"

García-Gallego, Aurora – Georgantzís, Nikolaos, 1999. "Dominance in the Tetra Pak Case: An Empirical Approach", *European Journal of Law and Economics* 7:137-160.

Nalebuff, Barry, 2003. "Bundling, Tying and Portfolio Effects", *DTI Economics Paper* No. 1.

Tirole, Jean, 2005. "The Analysis of Tying Cases: A Primer", *Competition Policy International*, vol. 1, no. 1.

Whinston, Michael D., 1990. "Tying, Foreclosure and Exclusion", *The American Economic Review*, vol. 80, no. 4, pp. 837-859.

## Books

Bork, Robert H., 1978. *The Antitrust Paradox – A Policy at War with Itself*. New York: The Free Press.

Korah, Valentine, 2004. *An Introductory Guide to EC Competition Law and Practice*. 8<sup>th</sup> edition. Oxford: Hart Publishing.

Martin, Stephen, 1988. *Industrial Economics – Economic Analysis and Public Policy*. New York: Macmillan.

Motta, Massimo, 2004. *Competition Policy – Theory and Practice*. New York: Cambridge University Press.

Pepall, Lynne – Richards, Daniel J. – Norman, George, 2005. *Industrial Organization – Contemporary Theory & Practice*. 3<sup>rd</sup> edition. Mason: South-Western.

Perloff, Jeffrey M., 2004. *Microeconomics*. 3<sup>rd</sup> edition. Pearson.

Steiner, Josephine – Woods, Lorna, 2003. *Textbook on EC Law*. 8<sup>th</sup> edition. Oxford: Oxford University Press.

## Court Cases

Case 27/76 United Brands Company and United Brands Continentaal BV v Commission [1978] ECR 207.

Case 85/76 Hoffmann-La Roche & Co. AG v Commission [1979] ECR 461.

Case C-62/86 AKZO Chemie BV v Commission [1991] ECR I-3359.

88/501/EEC Commission Decision (Tetra Pak I).

92/163/EEC Commission Decision (Tetra Pak II).

Case C-333/94 P, Tetra Pak International SA v Commission [1996] ECR I-5951 (Tetra Pak II - ECJ).

## Legislation

Treaty of Rome

Council Regulation (EC) No 1/2003 of 16 December 2002.

Council Regulation (EC) No 139/2004.

Council Regulation (EC) No 773/2004 of 7 April 2004.

## Notices, Guidelines, Discussions

Commission Notice on the Definition of the Relevant Market, 97/C 372/03

Commission Notice: *Guidelines on Vertical Restraints* 2000/C 291/01

Commission Notice: *Guidelines on the Effect on Trade Concept* 2004/C 101/7.

DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, 2005.

Report by the EAGCP, 2005. “An Economic Approach to Article 82”.

# Appendix

TREATY OF ROME

RULES ON COMPETITION

SECTION 1

**RULES APPLYING TO UNDERTAKINGS**

*Article 82*

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

- (a) directly or indirectly imposing unfair purchase or selling prices or 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.