

Tying Law in the European Union: Theory and Application

Doctoral Thesis
Doctorate in Philosophy (Law)

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Abstract

This research investigates the theoretical foundations of EU competition tying law. While tying prohibitions have existed in the EEC Treaty since 1957 the theoretical foundations of tying are not well understood. This thesis provides crucial insight into the theory and theoretical validity of tying law.

This thesis focuses on answering three questions in relation to tying: One, what was the original economic theory underlying the prohibition on tying? Two, how has this changed and on what economic principles is tying law currently based? Three, are these principles appropriately aligned with the current state of economic thinking? In order to answer these three questions this thesis considers three leading schools of thought in competition law (Ordoliberalism, the Chicago School of antitrust analysis and post-Chicago antitrust analysis) before analysing the jurisprudence of the EU Commission and courts and establishing which theory forms the foundation of EU tying law.

This research makes an interdisciplinary contribution through the use of both legal-historical analysis and legal-economic analysis. This yields important results on the historical development of tying law in Europe and also provides an economic analysis of the validity of EU law, assessing whether the aims of the law are economically valid and effectively applied. Where there are failures in the application of the law, normative proposals are given in order to demonstrate how the law and its application can be improved.

The result of this analysis is to establish two distinct periods of theoretical influence (the author calls these the mono- and di-theoretical periods). A novel analysis of the tying decisions made in the software market is also presented and a new theory of foreclosure proposed that explains the decisions made in that market.

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Introduction

The purpose of this thesis is to investigate the theoretical, doctrinal and practical application of tying law in the European Union (EU). The prohibition on tying by undertakings in a dominant position was written into the Treaty of Rome 1957 and has been retained in each subsequent treaty.¹ The relevant provision is Article 102 (d) TFEU² that states that abusive behaviour is prohibited; in particular abusive behaviour may consist in:

“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.”

In the early years of the European Union³ there were relatively few tying decisions and cases on tying and little commentator attention was dedicated to the subject. This changed in 2004 when *Microsoft I*⁴ was released and Microsoft was given a fine totalling € 497,196,304.⁵ Since this point tying law has been considered far more controversial. As a consequence of the controversy surrounding the *Microsoft I* decision, a number of questions have become highly significant in relation to EU tying law. First, what was the original economic theory underlying the prohibition on tying? Second, how has this changed and on what economic principles is tying law currently based? Third, are these principles appropriately aligned with the current state of economic thinking? The answers to these questions are significant for two main reasons: The first is the need for *legal certainty*. In order for dominant undertakings to be able to act in accordance with the law they, or the law firms advising them, need to be able to understand how the law is applied and what behaviour/harm it is seeking to prevent. There is a need for business to have confidence in the EU competition rules, which play a key role in market-building. The second reason is one of *economic efficiency*. Without understanding clearly the economic theory that underpins the law, it is not

¹ Currently Article 102(d) TFEU

² Originally Article 86 (Treaty of Rome) and Article 82 (EC).

³ Or European Economic Community and European Community as it was initially

⁴ *Microsoft* (Case COMP/C-3/37.792) [2005] 4 CMLR 965

⁵ This figure also includes a fine for infractions relating to withholding interoperability information

possible to evaluate whether it is meeting its objective, or even if the objective is valid, when considered in light of modern economic theory. It is therefore of great importance to analyse the law on tying in order to answer these questions.

Therefore the analysis of this thesis focuses around three primary issues that will be investigated using an interdisciplinary approach encompassing both legal-historical and legal-economic approaches.⁶ These are: ascertaining the theoretical foundations of tying law and its aims, analysing how the approach has changed since the foundation of the Treaty⁷ and finally assessing whether the approach follows the latest economic thinking and pursues economically justifiable aims. While there is much discussion regarding the use of economic theory in EU competition law there is a distinct gap. The current debate either focuses on the theoretical foundation of EU competition law generally or, where it applies specifically to tying, it focuses only on the most recent tying case law. There is a real need for a thorough analysis of tying as a specific area of competition law. It is into this gap that this thesis makes its contribution. By focusing more on this specialised topic it is possible both to assess the economic schools of thought that exist in regard to this area of competition law and also compare them to the decisions of the European Commission and Union courts. Further by starting the analysis from the very earliest tying cases and working forward, this not only allows themes that were present in earlier decisions to be established but further it allows a clear progression to be identified in the law that provides a basis for predicting the reasoning of tying decisions in future. This paves way for the final contribution of this thesis which is to provide practical guidance to dominant undertakings on how to plan or adjust their commercial behaviour in such a manner as to avoid the negative attention of the European Commission, national competition authorities or even competitors by acting in breach of Article 102 TFEU.

⁶ The interdisciplinary approaches are discussed in greater detail below.

⁷ The Treaty of Rome

By carrying out thorough analysis, this will also allow the author to highlight where the decisions made by the Commission and EU courts have caused confusion within the law or failed to achieve their intended aims. Where this has occurred the author will make normative proposals in order make the law clearer and applied in a more effective fashion. Two normative proposals will be provided by this author (that are discussed further below) one that would improve the test for tying and one that provides examples of new, innovate remedies can be used to strengthen competition in situations such as those present in the Microsoft I⁸ decision.

As such this thesis will be divided into two sections. The first three chapters will consider the three main economic schools of competition (or antitrust) thinking. These are Ordoliberalism, the Chicago School and post-Chicago. These economic schools of thought are set out in the first three chapters so that it can be seen which of them is most likely to be the foundational theory underpinning tying law in the EU and further provide a base of comparison for the second part of the thesis. In the second part of the thesis, that is chapters four to seven, the decisions of the EU Commission and courts will be analysed and assessed. These chapters will provide an insight into where each theory has been either incorporated, rejected or ignored by the decisions and judgments of the European Commission and Union courts. By analysing the law over three different periods, these chapters will also demonstrate how the approach to tying has changed over time within the EU. Both parts of the thesis will rely upon an interdisciplinary legal/economic approach.

Chapters one, two and three combine two different interdisciplinary approaches that have been adopted. Chapter one takes a legal/historic perspective tracing the path of Ordoliberalism, from esoteric economic theory to a major influence that shaped the direction of German and ultimately EU competition policy. Chapters two and three will place less emphasis upon historical development and greater emphasis upon the economic aspects of the Chicago and post-Chicago approaches.

⁸ Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965

Chapter one focuses on the *Ordoliberal* or *Freiburg School of competition analysis*. Although this school has been traditionally thought to have influenced EU competition law due to the work of Gerber,⁹ this link has been challenged in recent years.¹⁰ In order to determine whether the law on tying is related to Ordoliberalism, research was carried out at Freiburg University¹¹ by this author to determine when tying was first prohibited in Germany, how tying law in Germany developed and was influenced by Ordoliberalism, and how this law came to be reflected in the provisions of Article 102(d) TFEU.

Chapter two begins by providing the historical setting for the development of the *Chicago school of antitrust analysis* (hereafter “the Chicago School”), showing the great significance of its legal-economic arguments when compared with the previously established thinking on competition in the United States where the predominant influence was that of the Harvard School of thought. It will focus on the Chicago contribution to tying analysis, showing that Chicago took a significantly different view of tying than was accepted at the time. This explanation is very important as it will be shown later in Chapter four how this approach to competition law, while not expressly rejected, has not been followed by the Commission and Union courts. Further, arguments put forward by parties before the courts that appear to have been derived from the Chicago School’s views have been rejected. In later chapters, the views of scholars of the Chicago School will be used as a lens to critique the EU approach to tying after which, the author will argue that the approach of the EU is economically justified.

Chapter three will examine and assess the contribution of *post-Chicago* analysis to tying thought. The chapter will present the very latest theories¹²

⁹ David J. Gerber, *Law and Competition in Twentieth Century Europe, Protecting Prometheus* (first published 1998, OUP 2001)

¹⁰ Pinar Akman, ‘Searching for the long-lost soul of art.82 EC’ (2009) 29 OJLS 267; see also Pinar Akman, Hussein Kassim, ‘Myths and Myth-Making in the European Union: The Institutionalization and Interpretation of EU Competition Policy’ (2010) 48(1) *Journal of Common Market Studies* 111

¹¹ Albert-Ludwigs-Universität Freiburg

¹² The earliest post-Chicago theories began to be published in 1990

that have established the circumstances in which tying can cause anti-competitive effects in the relevant market. Again, this analysis will provide an essential theoretical foundation for later chapters, particularly chapters six and seven, in which it will be argued that post-Chicago theory is now being incorporated into the Commission's assessment of tying, and will be important in determining the approach of the competition authorities in future tying decisions.

Chapters four, five, six and seven represent the qualitative doctrinal analysis of EU competition law. The tying law of the EU is broken down into four separate chapters representing particular periods of EU jurisprudence. Chapter four covers the period between the very first cases on tying and 2004, just before the publication of the *Microsoft I* decision. The fifth chapter covers the *Microsoft I* decision itself and the sixth chapter covers the remedy imposed in that decision. Chapter seven analyses the tying decisions and Guidance issued since the *Microsoft I* decision. These three periods have been selected because the author believes the *Microsoft I* decision represents a watershed of the EU Commission and General Court's approach.¹³ The first period that lasts until 2004 will be referred to as the "mono-theoretical period", the second period consists of only the Microsoft decision and remedy and the third period consists of the post-Microsoft period.¹⁴ They will accordingly be referred to as the mono-theoretical period, Microsoft and post-Microsoft periods. This thesis relates to tying generally, that is to say both non-software/technology tying markets and software/technology markets. However, all the judgments that were handed down during the mono-theoretical period relate to classical ties and in the Microsoft and post-Microsoft periods the decisions that have been made all relate to technological tying. Nonetheless, it will be argued (in Chapter 7) that the changes in the Commission and courts' approach to tying during the Microsoft

¹³ The Court of Justice of the European Union has yet to have the opportunity to approve of this new direction

¹⁴ Both Microsoft and post-Microsoft represent "di-theoretical" periods. The di-theoretical period represents the period in which the Commission and EU courts approach to tying law is informed by both Ordoliberal and post-Chicago theory.

and post-Microsoft period are likely to apply to both classical and technical tying situations.

Chapter four presents the results of the analysis of tying decisions made by the Commission, EU courts and Advocate Generals' Opinions during the mono-theoretical period. This assessment articulates the approach of the EU competition authorities and demonstrates the economic concerns that tying law was intended to meet and the aims that tying law was intended to achieve. These economic concerns and aims are then compared with the economic theories set out in the first three chapters in order to show that tying law during the mono-theoretical period displays concerns that are consistent with Ordoliberal theory. Further deepening the law and economic analysis, the approach used by the EU competition enforcement authorities will then be criticised through the lens of the Chicago School. It will be argued that the EU approach to tying is economically justified as it pursues valid economic goals, namely protecting the freedom of the customer to choose the most efficient combination of products and protecting competition in markets that are already subject to limited competition.

Chapter five assesses *Microsoft I* itself. Using primary legal sources this chapter will show how the test in *Microsoft I* was not a mere reformulation of previous law but included two significant changes. The first of these changes, the use of the term "separate products", will be shown to be a departure from the terminology of previous case law. While only a semantic change it will show that this change not only makes the aim of the law less clear but further opened the Commission and EU Courts up to criticism. The second major change will be shown to be the inclusion of a requirement of foreclosure. This will show that the *Microsoft I* case was a turning point in the law, where the Commission began to take a di-theoretical approach. That is to say that the law began to incorporate elements of economics taken not only from Ordoliberalism but also from post-Chicago.

Chapter six assesses the failure¹⁵ of the remedy ordered in the *Microsoft I* decision. The chapter explains the circumstances present within the case that caused the failure before presenting a normative proposal consisting of a selection of remedies that could have been offered in the place of the actual remedy. In each instance the economic and legal benefits and drawbacks that would be present will be put forward. The assessment will take into account what the economic impact, such as any cost to competitors or consumers would be, what impact on competition it may have and what burdens it would place upon the dominant undertaking and any practical problems preventing or hindering its effective implementation. One of these potential remedies will be a new model that is inspired by the aims of Ordoliberalism. This normative proposal provides a novel method of ensuring that Microsoft's dominance does not provide it with the opportunity to foreclose the market, while providing a relatively minor commercial burden upon Microsoft itself. Another benefit of this remedy is that it uses the market price mechanism to aid the implementation of the remedy rather than working against it or requiring the Commission or national competition authority or court to determine particular service or product values. This is a particularly significant contribution as despite the attention that the *Microsoft I* decision has garnered and the broad acceptance of the failure of its remedy, there has been very little discussion directed towards what the remedy could or ought to have been. This chapter then is an important contribution in not only considering the reason behind the failure of the *Microsoft I* remedy but further presenting new potential remedies that are substantially unlike any of the remedies that have since been considered and it is argued will engender greater compliance with Article 102 (d) TFEU.

The final chapter focuses on the Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty (now 102 TFEU)¹⁶ to abusive exclusionary conduct by dominant undertakings and the *Microsoft II*

¹⁵ The remedy required Microsoft to provide a version of Windows without Windows Media Player. This version was subject to insignificant demand.

¹⁶ Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02

commitments decision.¹⁷ That is to say it covers the period since the *Microsoft I* decision was handed down to the present (2014). This chapter will briefly examine the debate leading to the publication of the Guidance before assessing its impact on the tying law, in particular, taking careful note of the incorporation of economic theory. Drawing on the economic theories set out in chapter three it will be shown that the Guidance makes deliberate reference to the economic theories of competitive harm that have been developed mainly by the post-Chicago authors. Finally, through qualitative analysis of the *Microsoft II* decision and assessing it in light of *Microsoft I*, a new theory has been proposed by the author. This theory is based on the argument that the Commission applies a specialised test to the software market unlike that which it applies to other markets. It will be argued that this is due to the unique characteristics of software markets. It will be shown that the concern of the Commission is the “evasion” of customer choice. It will further provide novel guidance to dominant software undertakings that will explain the behaviour that will concern the Commission, explain the underlying reasoning and direct such undertakings on how to avoid proceedings being issued by the Commission and lead to more effective compliance with the EU competition law rules.

Methodology

This thesis is ambitious in the sense that it adopts a number of different research methodologies within the broader context of a law and economics approach to the regulation of tying in the EU. It employs theoretical, normative and empirical elements where appropriate.

Normatively, the work will propose alternative remedies that could have been implemented in the *Microsoft I* decision (Chapter Six). This is a great value due not only to the lack of success experienced by the actual *Microsoft I* remedy but also due to the dearth of literature that has proposed alternative remedies or careful consideration of the impact of such remedies. These

¹⁷ Microsoft (tying) (Case COMP/C-3/39.530)

remedies strengthen competition and help bring the foreclosure caused by the tie to an end.

Empirically, the thesis will use a legal historic analysis to establish the manner in which certain legal systems have incorporated economic theory into their law. In particular, this will include the German competition law system and the gradual influence of Ordoliberalism. Further it will include the development of antitrust law in the US and its development through a number of stages, when it has absorbed economic theory from a number of schools of thought. This historical empirical analysis provides insight into how the law of EU and US has progressed from early stages of the development of the competition law rules where judgments appeared to make little reference to economics, to periods where the law was and is increasingly influenced by economic theory. The information used here includes that which was gathered while in Germany, where both primary and secondary sources unavailable in the UK, were evaluated to establish the theory underlying German and EU competition law.

Theoretically, the thesis includes discussion of the three main schools of competition thought: Ordoliberalism, the Chicago School and post-Chicago. It will assess the impact of these theories within the three time frames established. A central element of this thesis will be to establish which school of thought the EU approach to tying most closely resembles. It will further establish where more than one school of thought starts to permeate the EU approach. Lastly, it will establish a theoretical explanation for the Commission's approach to tying within the software industry. This is of particular utility as it is not only a new legal theory but gives an explanation as to why this approach is used and how undertakings can direct their behaviour to avoid enforcement proceedings or litigation. With the increasing digitisation of markets it is also likely that this approach to software based markets will remain a focal issue within the EU competition authorities' enforcement of tying law, making its explanation all the more significant.

Chapter 1

Ordoliberalism and its influence on EU tying law

1.0 Introduction

While until relatively recently Ordoliberalism or “the Freiburg School” remained a relatively understudied subject¹ within the last few years it has become an area of increasing legal and historic interest. Debate has arisen between commentators such as Gerber,² Akman,³ Warlouzet⁴ and others⁵ about the origin of EU competition law and its theoretical and historical foundations. Much of it has focused around the question of how much of an impact Ordoliberalism has had on EU competition law. This links to the desire to modernise European Competition Policy, which has created a need to understand the original foundational theories behind it, spurring greater interest in Ordoliberalism.⁶

The purpose of this chapter is to further build on this work and establish a theoretical point of reference for an analysis of EU tying law in later chapters. In relation to the historical aspect of this chapter, whereas the works of the commentators mentioned above have focused on establishing the links between Ordoliberalism, German competition policy and EU competition policy generally, this work focuses more specifically on tying and its theoretical foundations.

In relation to the thesis as a whole the purpose of this chapter is to demonstrate that tying law in the EU has roots inspired by Ordoliberal thought. This is important as without understanding the theoretical roots underlying EU tying law it is not possible to know if the tying law prohibitions are themselves

¹ Nicola Giocoli, ‘Competition versus property rights: American Antitrust law, the Freiburg School, and the early years of European competition policy’ (2009) 5 JCL&E (4) 748; Razeen Sally, *Ordoliberalism and the Social Market: Classical Political Economy from Germany* (1996) 1 *New Political Economy* 2 233-257 after 50 years’

² David J. Gerber, *Law and Competition in Twentieth Century Europe, Protecting Prometheus* (first published 1998, OUP 2001)

³ Pinar Akman, ‘Searching for the long-lost soul of art.82 EC’ (2009) 29 OJLS 267; see also Pinar Akman, Hussein Kassim, ‘Myths and Myth-Making in the European Union: The Institutionalization and Interpretation of EU Competition Policy’ (2010) 48(1) *Journal of Common Market Studies* 111

⁴ Laurent Warlouzet, ‘The Rise of European Competition Policy, 1950-1991: A Cross-Disciplinary Survey of a Contested Policy Sphere’ EUI Working Paper RSCAS 2010/80

⁵ Discussed further below

⁶ Christian Ahlborn and Carsten Grave, ‘Walter Eucken and Ordoliberalism: An Introduction from a Consumer Welfare Perspective’ (2006) 2 *CPI* 2 Autumn 198

economically rational. This chapter will establish a link between Ordoliberalism and EU tying law and prepare a position from which to assess, in chapters four to seven, what the economic reasoning underpinning EU tying law is and whether it is valid. Where appropriate this will also allow argument to be made for what the law ought to be and how it could be improved.

To this end this chapter will be divided into five parts as follows:

- the historical context of Ordoliberalism;
- the general principles of Ordoliberalism;
- the Ordoliberal influence in post-war Germany;
- the historical development of tying law in the German legal system;
- the transition of Ordoliberalism from German law to EU competition law.

First, it will be demonstrated that the historical context of Ordoliberalism and its influence in post-war Germany demonstrates that the Ordoliberals were, due to their support for the free market and their opposition to the Nazis, well positioned to make a major impact on the economic thinking of the German nation. The post-war influence of the Ordoliberals shows that the Freiburg school went from what was an essentially academic tradition to one that not only influenced but was strongly involved in the development of post-war German competition law. Second, the general principles of the Ordoliberal School will be explained so that it will be possible to identify in later chapters the Ordoliberal themes and principles that are expressed in EU competition law tying decisions. Third, the chapter will focus specifically on the law relating to the practice of tying and set out its earliest developments in Germany. This contribution will show that the first tying prohibitions came about through the application of very general principles of law based on the German Civil Code. These were applied by judges to business transactions that restricted economic freedom. These broad provisions appear to have been based on moral judgements rather than economic theory. It will then be explained that after World War II the legal tradition of the United States began to have an impact on German competition law through the introduction of laws in the British and US allied zones. But, most importantly from a current EU

perspective, it will be argued that one of the primary laws against restraints of competition in Germany was based upon Ordoliberal principles and that this law is strongly reflected in the Treaty of Rome Article 86 (102 TFEU) tying provisions, suggesting that the tying provisions within the original EEC Treaty are related to the German Act against restraints of competition and as a result are influenced by Ordoliberal legal economic thought.

This is an important contribution to the state of EU Competition law knowledge as, by establishing the theoretical and economic basis of tying law, it provides a starting point from which it can be assessed whether the economic theory underpinning tying law had previously or has presently economic validity. This theoretical link will also serve as a point of comparison when analysing the tying decisions of the Commission and the European Union (EU) courts, to show that their decisions are consistent with the theory and therefore provide an insight through which greater understanding of EU tying law can be gained. This understanding will then help provide a basis on which to predict future decisions with greater accuracy.

2.0 The historical context of Ordoliberalism: the Birth of Ordoliberalism

In Germany 1933, the National Socialist Party was just taking control of the German Federal Government. At around the same time, 800km away in Freiburg, three scholars, Walter Eucken, Franz Böhm and Hans Grossmann-Doerth, came together, and found that they were all concerned about the failing of the Weimar Republic and had similar thoughts about what ought to be done in response to this.⁷ Walter Eucken was the Professor of Economics in Freiburg University, Hans Grossmann-Doerth came to Freiburg in 1933 to receive a Chair in Law where his major interest was the problem of private economic power.⁸ Franz Böhm came to Freiburg in 1933 to teach law after working in German cartel law enforcement in the German Ministry of Economics. These three started working together and found that they had much in common. Böhm said “we focused together [on] ... the issue of private power in a free society”.⁹ All three had considered this to be the fundamental cause of the failure of the Weimar government, politically and economically.

Given the libertarian and free market nature of the views of the Ordoliberal School, it is quite surprising that they were able to survive the period of the Nazi regime. When the Nazis seized power in 1933, almost half the economists and social scientists at German universities and other research centres were dismissed.¹⁰ Eucken and his circles provided resistance to the Nazi regime, not least at the *Erfurter Rektorentag* in 1933 where they tried to convince the German Universities to stand up to Hitler¹¹ (unsuccessfully). Yet, despite this, the Freiburg school was not disbanded. Although members of the Freiburg School were arrested, imprisoned and dismissed from their jobs,

⁷ Gerber (n 2) 233

⁸ Hans Grossmann-Doerth, *Selbstgeschaffenes Recht der Wirtschaftsordnung und staatliches Recht* (Freiburg i.B., 1933)

⁹ Böhm, ‘Forschungs- und Lehrgemeinschaft’, 162

¹⁰ Heinz Rieter and Matthias Schmolz, ‘The ideas of German Ordoliberalism 1938-45: pointing the way to a new economic order’ *EJHET* 1:1 Autumn 1993 91

¹¹ Irene Oswalt-Eucken, ‘Freedom and Economic Power: Neglected Aspects of Walter Eucken’s Work’, *Journal of Economic Studies*; 1994; 21, 4 38

generally they remained free from severe interference from local officials.¹² It has been suggested by Gerber that this was largely due to Freiburg's strong liberal tradition and lack of strategic importance that allowed the University to "minimise" Nazi influences for as long as possible.¹³ This allowed them to focus on their main aim, which was to provide a new basis for German society after the war had finished.¹⁴ This new basis would, much like their resistance to National Socialism itself, be inspired through a morality and social concern based upon their Christian beliefs,¹⁵ to the extent that they were also involved in producing a programme to serve as a basis for discussion at an ecumenical world conference of churches after the war was over.¹⁶

Although the economic objections to Nazism may now appear diminutive in contrast to the moral objections, nonetheless the Freiburg School was opposed to both stances of the Nazis. Eucken noted that the economic order that existed in Germany during the time of the Second World War could not be a permanent order (*Dauerordnung*). Three reasons were given for this: First, the centrally planned economy that existed served one main purpose; war. When the war finished central planning would not be suitable for serving the needs of the many differing priorities; Second, fixed prices meant that companies were calculating costs on prices that did not accurately reflect the scarcity of those goods; Third, credit expansion had created discrepancies between total purchasing power and supply.¹⁷

Eucken noted that these issues could not just be solved with *laissez-faire* classical economics, such as the non-interventionist approach favoured at the time in the US, but rather if free market principles were applied to the German economy without an appropriate framework then there would be severe

¹² Gerber (n 2) 235

¹³ *ibid* 235

¹⁴ *ibid*

¹⁵ *ibid* and Heinz Rieter and Matthias Scholz, 'The ideas of German Ordoliberalism 1938-45: pointing the way to a new economic order' *EJHET* 1:1 Autumn 1993 97

¹⁶ The Arbeitskreis Freiburger Denkschrift (Working Group on the Freiburg Memorandum; Kluge 1988: 27-9)

¹⁷ Walter Eucken, *Wettbewerb als Grundprinzip der Wirtschaftsverfassung*. In Schmolders, G. (ed.), *Der Wettbewerb als Mittel volkswirtschaftlicher Leistungssteigerung und Leistungsauslese* (Berlin, Duncker & Humblot 1942) 31-33

problems. This was due to excess money, in one part, and the huge concentrations of power in the hands of German industrial companies that had occurred due to the actions of the Nazis during the war.¹⁸ Should these concentrations be left intact without any framework to control them, then there would actually be a lack of freedom rather than a real increase.¹⁹ It was this freedom, that could be obtained by sharing economic power or by preventing its concentration, which was so important in the Ordoliberal school of thought²⁰ and was a central tenet in their work.

In addition to the founding members, the Ordoliberal School drew other prominent followers. These include: Adolf Lampe, associate Professor and economist in Freiburg; Constantin von Dietze, who joined Freiburg University in the summer of 1937, agricultural scientist, lawyer, economist and theologian; Friedrich A Lutz, Eucken's 'most outstanding student';²¹ Bernhard Pfister, co-contributor in Ordoliberal works; Rudolf Johns, Freiburg economist and later Professor; Karl Friedrich Maier; Paul Hensel, student of Eucken;²² Leonhard Miksch, economist and University professor; Ludwig Erhard economist and later from 1949 to 1963 Federal Minister of Economics , 1963-1966 second Chancellor of the Federal Republic of Germany and 1966/67 CDU chairman; and Fritz W.Meyer who worked at the Federal Ministry of Economics.

¹⁸ Walter Eucken, Wettbewerb als Grundprinzip der Wirtschaftsverfassung. In Schmölders, G. (ed.), *Der Wettbewerb als Mittel volkswirtschaftlicher Leistungssteigerung und Leistungsauslese* (Berlin, Duncker & Humblot 1942) 35-36

¹⁹ Eucken (n 17) 36-37

²⁰ See Eucken in: Peacock, A.T. and Willgerodt, H. (Eds), *Germany's Social Market Economy*, (London, Macmillan 1989) p35; Walter Eucken, (1948/1982). The social question and Böhm, Forschungs-und Lehrgemeinschaft', 162 and Nils Goldschmidt, Michael Wohlgemuth, 'Social Market Economy: origins, meanings and interpretations' CPE (2008) 19 269.

²¹ Harald Hagemann, Germany after WWII: Ordoliberalism, the Social Market Economy, and Keynesianism (presentation)

²² <<http://www.kas.de/wf/de/71.5885/>> accessed 16 April 2014

3.0 General principles of Ordoliberalism

3.1. Economic power

One of the fundamental focuses of the Ordoliberal school was the accumulation, exercise and abuse of economic power and on the opposite side of this, economic freedom. The consideration of economic power formed the basis upon which one could understand economic behaviour. Eucken stated, “To understand economic reality past, present and probably throughout the future, it will be necessary to understand economic power and to perceive the striking uniformities in the method of groups struggling for power.”²³ This matter was of great importance in the Ordoliberals’ minds as they had seen how the influence of cartels had damaged so much of Germany in the Weimar period.²⁴ As a result, the Ordoliberals believed that the state needed to protect the economy. Without the protection of a strong democratic state, private enterprise was able to acquire such high levels of economic power that they could undermine and eliminate competition.²⁵ Therefore it was the stance of the Ordoliberal school that the state must either control private economic power or it will be controlled by private economic power.

3.2. Competition

To the Ordoliberals, competition is to a certain extent the weapon with which a strong government is to moderate the acquisition of economic power. This is best summarised by Eucken, who stated “Only in one form of market does economic power disappear completely, that is, under conditions of perfect competition.”²⁶ Competition was not some abstract or vague concept which was not scientifically and objectively defined. To Eucken, economic study could not be carried out effectively using poorly defined words.²⁷ Perfect competition or *Vollständiger Wettbewerb*²⁸ was defined as a market where no firm has the power to coerce conduct by other firms, that is to say, to each

²³ Walter Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 263

²⁴ Gerber (n 2) 251

²⁵ *ibid* 250

²⁶ Walter Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 269

²⁷ *ibid* 24-25

²⁸ Which is often translated as perfect/complete/full competition.

firm the market price of a good or service is taken as a given, so increasing or decreasing production will have no expected effect on the price of goods being bought or sold.²⁹ Consequently, no one company can significantly influence the cost of goods and services using their own market power.

This competition was very important to the Ordoliberals, for with it no one in the market has power to influence price or structure, or in reality, everyone has a very small share of the power and as such it is far more difficult for it to be misused to manipulate the legislature or cause other destructive effects. The Ordoliberals believed that whether or not private economic powers or state powers could take advantage of society depended mainly on the moral and religious stance of the leaders, but in addition to that, unscrupulous striving after profit flourished most where the majority of the community were largely powerless.³⁰ It is in this that Ordoliberalism considered competition as an end in itself, not just a means to an end.³¹ It was a state in which *economic and political freedom* was achieved.³²

The way private economic power is treated is where classical liberalism and Ordoliberalism diverge. At the heart of liberalism is the view that the power of the state needs to be limited and the antitype of that power is freedom from the interference of the state. This was taken further by the Ordoliberals who then stated that “competition is necessary for economic well-being and that *economic freedom* is an essential accompaniment to political freedom”.³³ Competition would help maintain a minimum of private power, and this minimum would help maintain the freedom of the many. This diverges from classical liberalism in that it requires not a weak state, but a politically strong

²⁹ Gerber (n 2) 245 and Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 139, 140

³⁰ Walter Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 263

³¹ Ian Rose, Cynthia Ngwe, ‘The Ordoliberal tradition in the EU, its influence on Art 82 EC and the IBA’s comments on the Art 82 EC Discussion Paper’ (2007) 3 Competition L.Int’l 8

³² It will be seen in later chapters that economic freedom is a primary principle in the EU tying law approach.

³³ Gerber (n 2) 240; emphasis added as economic freedom will be revealed as a fundamental theme in EU competition tying law in later chapters.

state to ensure that the economic conditions required for economic freedom and thus political freedom, are maintained.³⁴

3.3. The basis of economics

The Ordoliberals, particularly Eucken also criticised the basis upon which economics was analysed at the time. Although educated in the historical school, Eucken rejected this approach as it failed to provide useful abstract principles to help understand economics.³⁵ He believed that if one focused too much on the abstract then economic theory would no longer relate to reality and if one focused too much on context and historical facts then no useful rules would be revealed. This he called the great antimony.³⁶ To resolve this antimony Eucken would start by considering direct problems and questions in the real world.³⁷ This included looking at the actual plans of directors of economic units,³⁸ this included anyone who made economic decisions for an economic entity, from a warehouse manager to a housewife. Eucken stated that the economic plans were created in a different fashion depending on the form of the market, monetary system and monetary economy.³⁹ Further the decisions were based on the expected reactions of customers (eg. buying or seeking to buy elsewhere) and price data.⁴⁰

At this point Eucken's work broke from earlier models prevalent at the time by producing effective objective standards for different forms of market. The scientific basis for each market was how the market actors behaved with regard to the price of their product when compared to other substitutable products in the market. Using this behaviour, Eucken defined the following types of market:

³⁴ Werner Bonefeld, 'Freedom and the Strong State: On German Ordoliberalism' (2012) 17(5) *New Political Economy* 633, 647-651

³⁵ Walter Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 38-40

³⁶ *ibid* 41

³⁷ *ibid* 25

³⁸ *ibid* 117-118

³⁹ *ibid* 133, 134

⁴⁰ *ibid* 136

- Monopoly: where there is only one company that takes no account of other firms when deciding its price;
- Partial monopoly: One large firm and many small firms, where the small firms all follow the price set by the large firm;⁴¹
- Oligopoly: Where from previous experience a market actor counts on a particular response to his actions from his competitors;⁴²
- Competition: Where “owing to the considerable size of the market and the negligible size of his supply or demand, the individual does not reckon with any such reaction in his economic plan, but takes the price as a planning datum and acts accordingly”.⁴³

Through this method Eucken managed to break down any number of markets into a few specific types.⁴⁴ This provided the law with actual paradigms on which to base its deliberations. This provides a basis for economic definitions to be incorporated into the law, allowing the law to apply in different ways depending on the economic circumstances in each market. This was an astounding departure from the historical school and provided a new basis on which to develop further legal-economical questions. The specific uses of these definitions will be highlighted later⁴⁵ when comparison is drawn between EU competition law and Ordoliberal principles. This approach is also relevant when considering later (in chapter 5) how EU competition law has been criticised for not being rooted appropriately in economic evaluation, due to its focus on form. It is important to note here, at the very beginning of the Ordoliberal School no less, that a focus on market specific conditions and economic analysis was fundamental to the methods, particularly Eucken, employed.

⁴¹ Walter Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 138

⁴² *ibid* 147

⁴³ *ibid* 140

⁴⁴ Monopoly (singular and collective), partial monopoly, oligopoly, partial oligopoly and competition; Walter Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 150

⁴⁵ See Chapter Four

3.4. Economic Constitution

One aspect of the Ordoliberal school of thought that has been widely recognised is the need for an 'economic constitution'. This is likely to be because it is this tenet that creates a strong distinction between classical liberalism and Ordoliberalism.⁴⁶ Eucken argued:

"It has become obvious that the modern industrialised world does not of itself produce an effective economic system, but requires certain controlling constitutional principles as a foundation ... Legal thought and practice will to an increasing extent have the task of co-operating in the building and establishing of this economic constitution."⁴⁷

Various areas of law such as company law, taxation, employment law, patents etc would have to comply with the economic constitution, therefore their content would flow from the constitution. Also in the courts the economic constitution would act as an aid of interpretation of the other laws.⁴⁸

3.5. The independent monopoly office

The independent monopoly office is the concept of an independent government entity that would enforce the general principles of complete competition.⁴⁹ This would abolish and restrict monopoly positions. Also where monopolies exist they would regulate them in such a fashion that they are

⁴⁶ Sonja Eibl, Jorg-Martin Schultze, 'From Freiburg to Brussels and back again? The seventh revision of Germany's competition law. (2005) ECLR 526, 527; Lawrence H. White, 'The Postwar German "Wonder Economy" and Ordoliberalism' (2010) Working Paper 10-50, 33; Heinz Rieter, Matthias Schmolz, 'The ideas of German Ordoliberalism 1938-45: pointing the way to a new economic order' (1993) 1 EJET 1 87, 103 and Böhm, F. *Die Ordnung der Wirtschaft als geschichtliche Aufgabe und rechtsschöpferische Leistung* (Stuttgart and Berlin, W. Kohlhammer 1937) in Viktor J. Vanberg, 'The Freiburg School: Walter Eucken and Ordoliberalism' (2004) Freiburg discussion papers on constitutional economics 04/11.

⁴⁷ Walter Eucken, *The Foundations of Economics* (William Hodge, first published in English 1950) 315, Interestingly, considering the importance attached to this element, the requirement of an economic constitution was only really established in the last pages of the conclusion of Eucken's work *The foundation of economics and hardly noted whatsoever in the body of the work itself.*

⁴⁸ *ibid* 315; This aspect of Ordoliberal thought seems to have remained largely without criticism; in fact, it appears to have been corroborated by the later work of Buchanan on constitutional economic, see; Heinz G. Grosseckler, 'On Designing an Institutional Infrastructure for Economies: The Freiburg Legacy after 50 years' (1994) 21 JES 4 p24

⁴⁹ Gerber (n 2) 251

required to satisfy the 'as if' test, that is they are required to behave 'as if' there is competition in the market, even when there is not.⁵⁰

This has been described as “perhaps the most unrealistic and faulty aspect of Eucken’s work and that of the early Freiburg School”.⁵¹ Hayek noted that it is unrealistic to think that costs could be so readily calculable and that the result of competition so easily predicted that a company could be caused to act in an ‘as if’ manner.⁵² This criticism is understandable. Although many regulators exist for regulating natural monopolies it is often difficult for them to prove if and when a price rise is justified. Proving that wages are higher than normal or that a company is overstaffed can easily degenerate into a circular argument: is the company’s wages/costs/salary bill higher than industry average because the company has market power, or does the company have market power because they attract the best talent/spend the most on product/service development etc? It can be easy for a dominant company to justify price increases if there is not a sufficiently similar competitor to provide a base of comparison, and the more comparable competitors in the market place, the more likely that market is to be competitive. So the ‘as if’ standard is of limited use when considering whether a price is too high.

There are also issues with regard to another benefit of competition; innovation. Once again there is a distinct difficulty when considering how a company can be required to innovate ‘as if’ it is subject to competition. Research and development budgets can be allocated, but once that is done, it is not immediately obvious how an independent regulatory organisation, such as a monopoly office could ensure that the capital is used as efficiently and intensively as it would be under competition in order to develop new products or services or make the provision of current products or services more efficient. It is not possible to know in what ways a company would innovate if under competition, or predict what new goods, services or production methods

⁵⁰ Leonhard Miksch, *Wettbewerb als Aufgabe: Grundsätze einer Wettbewerbsordnung* (2ed, Godesberg, 1947) and Leonhard Miksch, *Die Wirtschaftspolitik des Als Ob’ 105 Zeitschrift für die gesamte Staatswissenschaft* (1949) 310.

⁵¹ Razeen Sally, ‘Ordoliberalism and the Social Market: Classical Political Economy from Germany’ (1996) 1(2) *New Political Economy* 233, 241

⁵² *Ibid* 233, 241

it would generate. As a consequence there is no standard against which to assess whether a company is innovating 'as if' subject to competition. A dominant company cannot be held to a standard that does not yet exist; neither can a monopoly office condemn a company for not discovering the undiscovered.

There is a manner in which the 'as if' standard does make sense however. This is in preventing dominant companies from employing behaviour that benefits them only because of their market dominance. So if a company subject to competition would actually lose market share by, for example, tying two products together, but due to their dominance and market power within one particular market they can actually exclude competitors through this behaviour, then they will be prohibited from pursuing this behaviour. This is because they are not behaving 'as if' they are subject to competition.⁵³ This interpretation of the "as if" test would avoid the criticisms noted above.

4.0 Ordoliberal influence in Germany

After the fall of Germany and with it Nazism in 1945, Germany was left economically and structurally in ruin. Nevertheless, at a time when Germany faced extensive reparations after the second humiliating defeat in a generation, with fresh knowledge of the horrific truth of the holocaust being revealed, there were those who believed that Germany could be restored to a position of economic strength. In this environment it was clear that Germany needed to be legally, economically, as well as physically rebuilt. As already mentioned the Ordoliberals had spent their time under Nazism focused on establishing a new basis for society in Germany after the war had finished.⁵⁴ The Ordoliberals had known that once the war was over, a "complete reorganisation" would be necessary.⁵⁵ Therefore in essence, the Freiburg

⁵³ In chapter 5 it will be possible to see where the courts and Commission of the EU have followed this standard on occasion.

⁵⁴ Gerber (n 2) 235

⁵⁵ Walter Eucken, *Wettbewerb als Grundprinzip der Wirtschaftsverfassung* (1942) 34, 30 In G. Schmolders (ed), *Der Wettbewerb als Mittel volkswirtschaftlicher Leistungssteigerung und Leistungsauslese* (Berlin, Duncker & Humblot 1942) 22-49

circles were poised for the situation, having committed their time to developing a plan for what to do in these very circumstances.

The allied zones in Germany, particularly those run by the United Kingdom and the United States were seeking to ensure their zones were run in accordance with free market principles. This period was the start of the Cold War and the United States wanted to use Germany to show off the superiority of the free market.⁵⁶ Therefore the British and Americans were looking for leaders with two particular qualities: First they were searching for capable men of legal and economic standing; and second those who were capable also needed to be un-associated with the Nazi regime. This was difficult because, as has already been mentioned, upon the Nazi seizure of power in 1933, almost half the economists and social scientists were dismissed from German universities.⁵⁷ In light of this, the Ordoliberals were the first and most significant economists who came forward who satisfied the criteria.⁵⁸ They were untainted by Nazism and in addition, the Ordoliberals represented a “third way”⁵⁹ between socialism on the one hand and laissez faire liberalism on the other. Liberalism was largely held in contempt by the German population who appeared largely intent on establishing some form of socialist solution.⁶⁰ As such the Ordoliberals provided what appeared to be a realistic prospect of providing a workable and free market while keeping the majority of the public content. This new order and structure took the name and form of the “Social Market Economy”. Of this political economic plan, Erhard stated that if there was one theory that “gave impetus to both a competitive and social economy, then it was the theory created by men known today as

⁵⁶ Nicola Giocoli, ‘Competition versus property rights: American Antitrust law, the Freiburg School, and the early years of European competition policy’ (2009) 5 (4) 775 and Gerber (n 2) 258.

⁵⁷ Heinz Rieter, Matthias Schmolz, ‘The ideas of German Ordoliberalism 1938-45: pointing the way to a new economic order’ (1993) 1 EJHET 1 91

⁵⁸ “Ordo-Liberalism Trumps Keynesianism in the Federal Republic of Germany” in Bernard Moss, ed., *Monetary Union in Crisis: The European Union as a Neo-Liberal Construction* (London: Palgrave, 2005), pp. 199-221.

⁵⁹ Christian Ahlborn and Carsten Grave, ‘Walter Eucken and Ordoliberalism: An Introduction from a Consumer Welfare Perspective’ (2006) 2 CPI 2 Autumn 198

⁶⁰ Gerber (n 2) 257

neoliberals or Ordoliberals”.⁶¹ The Ordoliberals were eminently suited to the situation, and ideally placed, being both favourable to the Germans and the allied powers. This was the case to such an extent that when the Academic Advisory Council was formed to support government policy in 1947 more than 50% were Ordoliberals.⁶²

When considering the impact of these scholars, it is also useful to note their confidence. The conviction of the Ordoliberals drove forward difficult changes at a difficult time. This is best demonstrated by a quote regarding Ludwig Erhard’s decision to remove most of the price controls and rationing rules in July 1948:

“...the top military American commander, General Clay called [Erhard] and told him on the telephone: ‘Professor Erhard, my advisors tell me that you are making a big mistake,’ whereupon according to his own report, Erhard replied, ‘So my advisors also tell me’.”⁶³

Crucially Erhard’s decision was not a mistake, and industrial production in the Western zones increased 50% in 6 months to the end of 1948.⁶⁴ From this point on, aided by Ordoliberal ideas, the West German economy continued to go from strength to strength; the *Wirtschaftswunder*⁶⁵ had begun.⁶⁶

4.1. Leading personalities in the implementation of Ordoliberalism in Germany

The founding members of Ordoliberalism have already been mentioned and while these men were instrumental in starting Ordoliberalism, there were a

⁶¹ Ludwig Erhard, *Gestern-Heute-Morgen in Gedanken aus fünf Jahrzehnten* (K. Hohnmann, Düsseldorf: Econ 1961/1988) p 696

⁶² Bilger, Francois, *La Pensée Économique Libérale dans L’Allemagne Contemporaine* (Paris, 1964) 211

⁶³ F.A. Hayek, “The Rediscovery of Freedom: Personal Recollections,” in Peter G. Klein, *The Fortunes of Liberalism*, vol 4 of *The Collected Words of F.A. Hayek* (Chicago, University of Chicago Press, 1992) pp 197-198

⁶⁴ Lawrence H. White, ‘The Postwar German “Wonder Economy” and Ordoliberalism’ (2010) Working Paper 10-50 (Chapter 9 The Clash of the Economic Ideas) 319

⁶⁵ “Economic miracle”

⁶⁶ See Lawrence H. White, ‘The Postwar German “Wonder Economy” and Ordoliberalism’ (2010) Working Paper 10-50 (Chapter 9 The Clash of the Economic Ideas); by 1958 per capita output had tripled, the economy outgrew even France and the United Kingdom.

great many more who were involved in transposing Ordoliberalism from economic theory to political reality. Of the founding members, Walter Eucken and Franz Böhm started the *Ordo* journal in 1948. Eucken also attended the Mont Pelerin Society meeting in Switzerland where he argued for the policies enacted in 1948 (removal of price restrictions etc). He also advised Ludwig Erhard (see below) on the abolition of price controls. Ludwig Erhard was an economist who, after the Second World War, became a German politician. Initially, he volunteered his services to the American occupation authorities. He first worked in Fürth in Northern Bavaria, before becoming the economics minister for all of Bavaria. He continued to rise, becoming economics minister for the UK-US bi-zone largely due to serendipitous political horse-trading between the major Germany parties.⁶⁷ Finally, Erhard became Minister of Economic Affairs of the West German Government and later Chancellor himself for three years. Another advisor of Erhard was Wilhelm Röpke. He wrote several books during the war, which Erhard had managed to get hold of illegally and “devoured” them.⁶⁸ Leonhard Miksch worked with Erhard in the Economic Administration, and had written his doctoral and post-doctoral dissertations under Eucken.⁶⁹ Alfred Müller-Armack, a professor of economics, took on some of the central tenets of Ordoliberalism and incorporated them into the ‘Social Market Economy’. This programme became the political programme of the Christian Democratic Union, the party in power in Germany from 1949 through to 1966.⁷⁰ Through the work of these men and the circumstances they found themselves in the concepts of Ordoliberalism were integrated into German economic policy.

⁶⁷ The larger Christian Democratic Union needed the votes of the smaller Free Democratic Party to form a majority coalition government and Erhard’s appointment was part of this agreement; see Lawrence H. White, ‘The Postwar German “Wonder Economy” and Ordoliberalism’ (2010) Working Paper 10-50 (Chapter 9 The Clash of the Economic Ideas) 321

⁶⁸ Lawrence H. White, ‘The Postwar German “Wonder Economy” and Ordoliberalism’ (2010) Working Paper 10-50 (Chapter 9 The Clash of the Economic Ideas) 330

⁶⁹ Nils Goldschmidt, “Alfred Müller-Armack and Ludwig Erhard: Social Market Liberalism,” [2007] Freiburg Discussion Papers on Constitutional Economics no. 04/12, University of Freiburg and Walter Eucken Institute pp14-15

⁷⁰ Nicola Giocoli, ‘Competition versus property rights: American Antitrust law, the Freiburg School, and the early years of European competition policy’ (2009) 5 JCL&E (4) 775. In addition to this Alfred Müller-Armack, who will be discussed further in the next section.

5.0 Tying law in the German legal system: the historical development

The preceding section has explained broadly how Ordoliberal scholars had an impact on the West German government and its economic policies. The aim of this section is to consider specifically how tying law developed in German competition law and when Ordoliberalism made an impact. It shall be shown that the earliest references to tying precede both US/Allied and Ordoliberal influence. Over time however the law developed and took on influences from US anti-trust law and Ordoliberal theory during the period after World War II. This gave rise to the German law which heavily influenced the EEC Treaty's provisions on tying.

The very earliest references to tying precede the Ordoliberals by quite some margin. Section 138 of the "Bürgerliches Gesetzbuch" (BGB) or German Civil Code stated that contractual restrictions that paralyze (lähmen) the economic freedom (wirtschaftliche Bewegungsfreiheit) of a natural or legal person were considered void.⁷¹ This was originally enacted in 1900. Without going into the nature of tying, the German Supreme Court on occasion caught tying under this law,⁷² although the wording of the law is clearly so broad that it could be used to apply to a number of different contractual restrictions and was not constructed specifically to target tying behaviour. However, later in 1932 the "Zugabeverordnung" (or ZugabeVO, enacted 3/9/1932) contained what was for the first time a clear reference to a tying prohibition set out in German law. It stated in section 1 paragraph 1, sentence 3 the following:

"The same applies (the prohibition set out previously), when another product or service is offered for a total price in order to conceal the addition of a commodity or service."⁷³

⁷¹ Udo Jansen, *Die Kopplungsverträge im Recht der Wettbewerbsbeschränkungen* (Band 5, Bad Homburg, Gehlen, 1968) page 96

⁷² *Bandeisen- und im Schuhmaschinenfall*, RGZ 135, 145; 165, 1; vgl. oben S. 54.

⁷³ In the original text: "Das gleiche gilt (d. h. das Verbot nach Satz 1), wenn zur Verschleierung der Zugabe eine Ware oder Leistung mit einer anderen Ware oder Leistung

This law was enacted prior to the Second World War, and predates Ordoliberal influence which only really came to prominence during the allied occupation of Germany. Therefore it is possible to see that the very earliest tying prohibitions that existed in Germany were unlikely to be the result of the influence of Ordoliberal scholars. Rather it developed out of very broad sections of the German Civil Code regulating business behaviour using broad moral standards and a general regard for individuals economic freedom. It is also worth noting that while the *Zugabeverordnung* describes a tying like scenario in German Law, it does not use the terminology to refer to tying that is presently familiar in German law.⁷⁴ These terms only came into the German legal vernacular after the Second World War.⁷⁵

At the end of the Second World War a second stage of competition law development came into play in Germany. The terms more widely associated with tying in German law currently ("Kopplungsvertrag" or "Kopplungsgeschäft") started to appear in the law at this time.⁷⁶ It was after the end of World War II when the Allies, particularly the United States, sought to break up the German cartels that these terms came into use.⁷⁷ The Allied governments enacted competition laws in their zone⁷⁸ that prohibited tying contracts.⁷⁹ These laws essentially followed the American position from section 3 of the Clayton Act⁸⁰

zu einem Gesamtpreis angeboten, angekündigt oder gewährt wird." See; Udo Jansen, *Die Kopplungsverträge im Recht der Wettbewerbsbeschränkungen* (Band 5, Bad Homburg, Gehlen, 1968) page 96;

⁷⁴ "Kopplungsvertrag" or "Kopplungsgeschäft"

⁷⁵ Udo Jansen, *Die Kopplungsverträge im Recht der Wettbewerbsbeschränkungen* (Band 5, Bad Homburg, Gehlen, 1968) page 98

⁷⁶ *ibid* page 98-99

⁷⁷ *ibid* page 99

⁷⁸ "Wettbewerbsbeschränkungen"

⁷⁹ Article V para. 9 c) 2 i Conn. m. Article I, Act No. 2 56/VO No. 78 (British Military Government Ordinance No. 78 of 12 February 1947 at page 412; American Military Government Law No.56 of 12 February 1947)

⁸⁰ Clayton Act 1914, 38 Stat. 731; 15 USCA Section 14 (1953); Section 3:

"It shall be unlawful for any person engaged in commerce, in the course of such commerce, to lease or make a sale or contract for sale of goods, wares, merchandise, machinery, supplies, or other commodities, whether patented or unpatented, for use, consumption, or resale within the United States or any Territory thereof or the District of Columbia or any insular possession or other place under the jurisdiction of the United States, or fix a price charged therefor, or discount from, or rebate upon, such price, on the condition, agreement, or understanding that the lessee or purchaser thereof shall not use or deal in the goods, wares, merchandise, machinery, supplies, or other commodities of a competitor or competitors of the lessor or

and the German courts even drew upon the US case law in the application of this law when necessary.⁸¹ However important differences existed even during this time. For example, the German Supreme Court did not follow the US Supreme Court and applied a rule of reason approach to tying contracts instead of a *per se* approach.⁸² This is a significant difference. But the most significant competition law event during this period was the implementation of the *Gesetz gegen Wettbewerbsbeschränkungen* or the Act against restraints of Competition (GWB 1957). With regards to tying, Section 18 stated that:

(1)The Cartel Authority may declare agreements between or among enterprises concerning goods of commercial services to be ineffective ... insofar as such agreements

1. Restrict one of the parties in its freedom to use the purchased goods, or other goods or commercial services, or
2. Restrict one of the parties in the purchase from or the sale to third parties of other goods or commercial services, or
3. Restriction one of the parties in reselling the purchased goods to third parties, or
4. *Commit one of the parties to purchase other goods or commercial services which are by their nature or in commercial practice not related to the purchased goods or commercial services...[emphasis added]*

(2) A restraint is not to be considered unfair within the meaning of sub-

seller, where the effect of such lease, sale, or contract for sale or such condition, agreement, or understanding may be to substantially lessen competition or tend to create a monopoly in any line of commerce.”

⁸¹ Udo Jansen, *Die Kopplungsverträge im Recht der Wettbewerbsbeschränkungen* (Band 5, Bad Homburg, Gehlen, 1968) page 99, see further; Fritz Rittner, *Die Ausschließlichkeitsbindungen in dogmatischer und rechtspolitischer Betrachtung* (Düsseldorf, Verl. Handelsblatt 1957) page 129; Kurt Biedenkopf, *Vertragliche Wettbewerbsbeschränkung und Wirtschaftsverfassung, Die Ausschließlichkeitsklausel als Beispiel* (Heidelberg, 'Recht und Wirtschaft' 1958)

⁸² Udo Jansen, *Die Kopplungsverträge im Recht der Wettbewerbsbeschränkungen* (Band 5, Bad Homburg, Gehlen, 1968) page 99; Drahtverschlußmaschinen case

paragraph 1 lit. b, if it is insignificant in relation to the opportunities of supply and demand which continue to be available to other enterprises.⁸³

Here it refers to clauses that oblige one party to purchase goods or services not by their nature or commercially associated.⁸⁴ Further in the government draft of the GWB they also specified the right of competition authorities to prohibit the conclusion of tying contracts by dominant companies.⁸⁵ This law is strikingly similar to the 1957 Article 86(d) within the EEC Treaty (now Article 102 (d) TFEU) even using the same terminology and phraseology:

Article 86 (EEC Treaty): (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.

But this raises the question of whether it was the original EEC Treaty⁸⁶ that influenced section 18 GWB or whether it was the negotiations in Germany around section 18 GWB 1957 that influenced the drafting of the EEC Treaty. After all both were agreed in the same year and they both came into force at the same time. Therefore in order to establish if Ordoliberalism is a theory that is foundational to the EU competition law approach to tying, the direction of influence must be established. This will be considered in the following section.

6.0 Ordoliberal theory's transition from German law to the EU competition law

⁸³ Alexander Risenkampff, Joachim Gres, *Gesetz gegen Wettbewerbsbeschränkungen* (Law Against Restraints of Competition) (Köln, Verlag, 1977) p 55, 57

⁸⁴ Udo Jansen, *Die Kopplungsverträge im Recht der Wettbewerbsbeschränkungen* (Band 5, Bad Homburg, Gehlen, 1968) page 100

⁸⁵ *ibid* page 99-100 "marktbeherrschende Unternehmen"

⁸⁶ The predecessor of the EEC Treaty, the Treaty of Paris that established the European Coal and Steel Community, was also subject to Ordoliberal influence through the German delegation (see Milène Wegmann, *Der Einfluss des Neoliberalismus auf das Europäische Wettbewerbsrecht 1946-1965, Von den Wirtschaftswissenschaften zur Politik* (2008, Baden-Baden, Nomos) p 55-56) however since this treaty did not carry with it references to tying it is outside the scope of this thesis.

Ordoliberalism, while initially relatively understudied,⁸⁷ has more recently become the recipient of much greater academic interest. It has been suggested that the original absence of study and awareness of the subject was most likely because of the language barriers and the simple timing of the formation of the school and interest in subsequent schools of thought.⁸⁸ However, within the last few years interest in this area has been steadily increasing. A desire to modernise European Competition Policy has created a need to understand the original foundational theories behind it, spurring greater interest in Ordoliberalism in the English speaking world.⁸⁹ From both a political and economic perspective, Peck has argued that since the events of the economic crisis of 2008, Ordoliberalism may now once again be in favour; its ordered liberalism providing an alternative market order.⁹⁰ But from a competition law point of view, the interest in Ordoliberalism in the English speaking world stretches further back, starting in 1998 with the publication of Gerber's seminal work on Law and Competition in Europe. This work was one of the first in English⁹¹ to suggest that there was a link between Ordoliberalism and the theoretical foundations of EU competition law. For 11 years Gerber's work was relied upon and frequently cited by those making reference to a theoretical framework underlying EU competition law. Gerber's work suggested that the Ordoliberals had a strong influence in the shaping of European competition law. However at the time of Gerber's writings the Official Records had not been made public.⁹² There was after all a disincentive for publication and investigation of the negotiations early in the life of the European project since it could undermine the integration process. After all concessions could be seen as failing to protect national interests and the association of ideas to certain countries could increase resistance to them

⁸⁷ Nicola Giocoli, 'Competition versus property rights: American Antitrust law, the Freiburg School, and the early years of European competition policy' (2009) 5 JCL&E (4) 748; Razeen Sally, Ordoliberalism and the Social Market: Classical Political Economy from Germany (1996) 1 New Political Economy 2 233-257 after 50 years'

⁸⁸ Heinz G. Grossekkettler, 'On Designing an Institutional Infrastructure for Economies: The Freiburg Legacy' (1994) 21(4) JES 9

⁸⁹ Christian Ahlborn and Carsten Grave, 'Walter Eucken and Ordoliberalism: An Introduction from a Consumer Welfare Perspective' (2006) 2 CPI 2 Autumn 198

⁹⁰ J. Peck, *Constructions of Neoliberal Reason* (Oxford, OUP 2010) page 275

⁹¹ In the English speaking world

⁹² Gerber (n 2) 343 and also Pinar Akman, 'Searching for the long-lost soul of art.82 EC' (2009) 29 OJLS 270

and slow down the process of integration.⁹³ More recently, however, this influence has been called into question by the work of Akman,⁹⁴ who argues that the influence of Ordoliberalism had been over emphasised in relation to the foundation of competition law in the EU. This conclusion was reached following research conducted into the *travaux préparatoires* of the competition rules leading up to the signing of the EEC Treaty in 1957. Akman argues that the documents were at times unclear⁹⁵ in their support for Ordoliberal concepts, on some occasions contrary to Ordoliberal ideals⁹⁶ and at other times the arguments of the German delegation themselves were antithetical to Ordoliberal theory.⁹⁷ Others such as Warlouzet have considered that the actual impact of Treaty of Rome's negotiations somewhat neutral, but instead have suggested Regulation 17/62, agreed after the signing of the EEC Treaty, gave the German competition tradition greater impact on EU competition law,⁹⁸ for example, by applying an ex-ante system of approvals rather than an ex-post system of enforcement in relation to agreements between firms.⁹⁹

Most recently however some commentators have focused on determining how the seemingly contradictory stories relating to the foundation of EU Competition law fit together.¹⁰⁰ For example, a group of lawyers and historians from various member states¹⁰¹ investigated a number of different areas of interest, mainly focusing on the way the Commission and EU courts and

⁹³ *ibid* 261

⁹⁴ Pinar Akman, 'Searching for the long-lost soul of art.82 EC' (2009) 29 OJLS 267; see also Pinar Akman and Hussein Kassim, 'Myths and Myth-Making in the European Union: The Institutionalization and Interpretation of EU Competition Policy' (2010) 48(1) *Journal of Common Market Studies* 111

⁹⁵ Pinar Akman, 'Searching for the long-lost soul of art.82 EC' (2009) 29 OJLS 267, 281-282

⁹⁶ *ibid* 280

⁹⁷ Pinar Akman, 'Searching for the long-lost soul of art.82 EC' (2009) 29 OJLS 267, 285

⁹⁸ Laurent Warlouzet, 'The Rise of European Competition Policy, 1950-1991: A Cross-Disciplinary Survey of a Contested Policy Sphere' EUI Working Paper RSCAS 2010/80 pp9

⁹⁹ Damien Geradin, Dr Anne Layne-Farrar, Nicolas Petit, *EU Competition Law and Economics* (Oxford, OUP 2012) para 1.54

¹⁰⁰ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013)

¹⁰¹ Thorsten Käseberg (Lawyer, economist), Adrian Kuenzler (Law, economics), Brigitte Leucht (Historian), Mel Marquis (Lawyer), Ernst-Joachim Mestmäcker (Lawyer), Lorenzo Federico Pace (Lawyer), Kiran Klaus Patel (Historian), Sigfrido M. Ramírez Pérez (Historian), Heike Schweitzer (Lawyer), Katja Seidel (Historian), Sebastian van de Scheur (Lawyer), Arthe Van Laer (Historian), Laurent Warlouzet (Historian).

Regulation 17/62 shaped the way competition law was applied in the EU.¹⁰² From the perspective of this thesis however the work of this group is less significant as it does not focus on how the German/Ordoliberal influence entered the EEC treaty in the first place, rather concentrating on events after the treaty was agreed. What is relevant here is that when considering the influence of the national traditions of the EU members on EU Competition law¹⁰³ they argue that, from an institutional perspective, German competition policy was among the most influential in shaping European competition policy.¹⁰⁴

Therefore it is still important to establish, using the information available, what evidence exists to demonstrate that Ordoliberal theory influenced EEC Treaty provisions on competition law. Below the various arguments that suggest Ordoliberalism has had a major impact on EU competition law will be presented, including the result of research conducted in Germany itself.

6.1. Evidence in support of the Ordoliberal influence

To evaluate the extent of the German government's influence, and the Ordoliberal influence, on the formation of the Treaty articles on competition law the following four avenues will be pursued: The involvement of Ordoliberals in the Treaty negotiations; the memoirs of those involved; German research; and broader European research.

6.2. The involvement of Ordoliberals in the Treaty negotiations

To begin then, those involved in the negotiations of the Treaty of Rome on behalf of Germany tended to adhere to Ordoliberal ideas. These include Walter Hallstein, one of the founders of the European Community, who became first President of the Commission. Also Hans von der Groeben, one

¹⁰² See particularly chapter 1 (Sigfrido M. Ramírez Pérez and Sebastian van de Scheur) and chapter 2 (Lorenzo Federico Pace and Katja Seidel) of K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013)

¹⁰³ See in particular chapter 3 (Adrian Kuenzler and Laurent Warlouzet) of K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013)

¹⁰⁴ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013) 110

of the two main drafters of the ‘Spaak Report’¹⁰⁵ and later first Commissioner for competition policy. Hermann Schumacher, an Ordoliberal economist who worked as head of the directorate in charge of cartels.¹⁰⁶ In addition Alfred Müller-Armack, the German Secretary of State for European Affairs, who has already been mentioned¹⁰⁷ and Ludwig Erhard who often put Ordoliberal economists in German delegations to (what would become) EEC negotiations allowing them to give representation to the Ordoliberal concepts of competition.¹⁰⁸ The position of these Ordoliberal scholars during the negotiations is of course not conclusive, but when read in conjunction with the other points it helps to build up a body of evidence that demonstrates that the Ordoliberal school was highly influential in the formation of EU competition law.

6.3. German Research

Looking at the commonality between the GWB and the Treaty of Rome, it is clear that either the law impacted the Treaty or the Treaty impacted the law. There were two major influences on the development of the GWB. The first being the influence of the Ordoliberals and the second being the support of the Allied Forces, particularly the Americans.¹⁰⁹ As a consequence much of the work of the Ordoliberals influenced the formation of the German Act against restraints of competition (GWB) 1957.¹¹⁰ This Act sought to preserve freedom of competition and was considered the constitution of the social market economy.¹¹¹ So this supports the idea that the German competition law (GWB) was based on Ordoliberal theory and values.

Authors such as Wegmann have further suggested that these ideas also affected the implementation of the competition law provisions of the 1957 EEC Treaty. However proving this is more difficult because of the political

¹⁰⁵ Paul-Henri Spaak, ‘Intergovernmental Committee on European Integration. The Brussels Report on the General Common Market’ (June 1956)

¹⁰⁶ Within the European Commission

¹⁰⁷ And had worked with Erhard on the “Social Market Economy”.

¹⁰⁸ Milène Wegmann, *Der Einfluss des Neoliberalismus auf das Europäische Wettbewerbsrecht 1946-1965, Von den Wirtschaftswissenschaften zur Politik* (2008, Baden-Baden, Nomos) p 81-82; see also Gerber (n 2) 263

¹⁰⁹ Wegmann (n 108) p 47-48

¹¹⁰ See most recently: K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013) p 98

¹¹¹ Wegmann (n 108) p 49-50

manoeuvring that accompanied the implementation of these measures. The German delegation to the negotiations wanted a ban on cartels and a separate prohibition on abuse of a dominant position within the Common Market. This reflected the GWB which was influenced by the Ordoliberals. The other delegations from France, Belgium and the Netherlands favoured controls that reflected their own national competition laws (whether those laws were in force or not).¹¹² The French, Belgian and Dutch drafts treated agreements and monopolies the same. The French wanted to ban both, while the Belgians and the Dutch wanted both to be subject to tests of abuse.¹¹³ However it should also be considered that while the countries were trying to protect their own national interests, both France and Germany were seeking to use competition to either maintain or increase the efficiency of their own economies.¹¹⁴ So there was also common ground. As a consequence it appears that in a tactical move, Müller-Armack withdrew the German proposal. This allowed the French delegation to bring their own final proposal which essentially met the German delegation's requirements and reflected to a large extent the German design.¹¹⁵ This was, of course, accepted by the German delegation. As a consequence the political victory was for France while the Treaty articles followed the German design.¹¹⁶

6.4.Memoirs

There are also memoirs available of those who were involved with the Treaty negotiations first hand. Below are extracts from the works of Joseph Van Tichelen, former Director General of the Belgian Ministry of Economic Affairs and Alfred Müller-Armack, who has already been mentioned, who worked in the Ministry of Economics under Ludwig Erhard and later become Secretary of State for European Affairs between 1958 and 1963. These views also provide

¹¹² Wegmann (n 108) p 84-85

¹¹³ Conference Intergouvernementale pour le Marche Commun et L'Euratom Bruxelles, le 18 Septembre 1956 Tableau Synoptique des Projets D'Articles Soumis par Les Délégations Concernant Les Regles de Concurrence Applicables Aux Entreprises ; see also Pinar Akman, 'Searching for the long-lost soul of art.82 EC' (2009) 29 OJLS 267, 285

¹¹⁴ Wegmann (n 108) p 86-87

¹¹⁵ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013) p 192: "When the Treaty of Rome was ratified by six member states, only Germany had competition rules similar to Articles 85 and 86 of the EEC Treaty"; although also see, within the same book, a discussion of the "crucial French influence" on Article 85 (Article 101 TFEU).

¹¹⁶ Wegmann (n 108) p 89-90

a valuable insight to the negotiations and also suggest success on the part of the Germans in negotiating competition law articles that favoured their legal and theoretical tradition. Joseph Van Tichelen writes:

“[Articles 85 to 90]¹¹⁷ well known articles in the legal world and the subject of fear to industrialists, were proposed by the German delegation. We knew that there was going to be fierce debate. But Bonn’s arguments were irrefutable. It was necessary to prevent secret agreements re-establishing borders by private agreement after they had been removed. The articles in question are constitutional nature, therefore they are written in general terms, which were later made more specific by the regulations of the Community (regulation 17 in particular) and by the decisions of the Court”¹¹⁸

And also Müller-Armack writes:

“the opponents of a cartel policy ... had presented texts that were a blatant contradiction of the German viewpoint. ... The French delegation, in particular, put up a great deal of bitter resistance until I asked them to present their own text. To our surprise, they submitted a draft that hardly differed from our concept or from the text used later in the Treaty. Without any hesitation, I accepted the French proposal.”¹¹⁹

¹¹⁷ Presently Articles 101 to 106

¹¹⁸ Original quote: “Articles 85 à 90. Règles de concurrence. Ces articles, fameux dans le monde des juristes et sujet d'effroi pour les industriels, furent proposés par la délégation allemande. Nous savions que nous allions au-devant de fortes hostilités, mais l'argumentation de Bonn était irréfutable. Il fallait prévenir qu'après l'effacement des frontières, les opérateurs privés ne les rétablissent par accord secret. Les articles en question sont de nature constitutionnelle, donc rédigés en formules générales, qui ont été précisées ultérieurement par des lois de la Communauté (règlement 17 notamment) et par la jurisprudence de la Cour de Luxembourg.”

From Joseph Van Tichelen, *Souvenirs de la négociation du traité de Rome*
http://www.ena.lu/joseph_van_tichelen_souvenirs_negociation_traite_rome-010007163.html
accessed on 03/2011

¹¹⁹ Müller-Armack, Alfred, *Auf dem Weg nach Europa, Erinnerungen und Ausblicke*. Tübingen (Stuttgart, Rainer Wunderlich, C.E. Poeschel, 1971) pp. 106-120. Translated by the CVCE; see also Jean Monnet, *Memoirs* (Knopf Doubleday Publishing Group, 1978)

This suggests that the Treaty provisions were largely based around what the German delegation was seeking, even if it was the French proposal that was indeed accepted.¹²⁰

6.5. Broader European research

Most recently greater work has been done to establish the varying levels of influence on EU competition law from a wide range of potential sources. With regard to the influence of national traditions of competition law further support has been given to the idea that the German influence was decisive in framing the EEC Treaty's competition provisions¹²¹ and in the drafting of Regulation 17/62.¹²² While the French did secure some provisions, particularly in reference to exclusive dealing agreements during the negotiations on Regulation 17/62, the general framework of Regulations 17/62 was influenced by the German approach.¹²³ This can be seen not least in the ex-ante system of enforcement. This required agreements to be notified to the Commission.¹²⁴ Additionally, it has been argued that the national competition laws had an impact not only on the substantial provisions of European competition law but also on the institutional implementation. That is to say, the French Commission technique des ententes¹²⁵ had mostly non-permanent staff and the French and Dutch authorities dealt with far fewer cases. The French authority, for example, reviewed 19 cases in its first five years while the Dutch reviewed only 36 cartels over six years.¹²⁶ In contrast, the German

¹²⁰ For an alternative view point see; Ian S. Forrester, *The Modernization of EC Antitrust Policy, Compatibility, Efficiency, Legal Security* (2000) Florence, June 2/3 pp 4-5, although once again this opinion applies to Article 85 (101) not 86 (102) and therefore has limited application to tying practice.

¹²¹ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013) p 110

¹²² Regulation 17/62 will not be a focus in this work as it relates to the implementation of procedural rules regarding Article 85 (now article 101). Therefore while an understanding of the Regulations may give light as to further German influence on European competition law it does not, as a consequence, relate to tying.

¹²³ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013) p 110-111

¹²⁴ This has since been altered by Regulation 1/2003 creating a directly applicable exception system. Notably this modification was strongly objected to by German Lawyers, see; Birgit E. Will, Dieter Schmidtchen, 'Fighting Cartels: Some Economics of Council Regulation (EC) 1/2003' Center for the Study of Law and Economics, Discussion Paper No 2008-02 (July 16, 2008) p 3

¹²⁵ Predecessor of the "Autorité de la concurrence" the French competition authority

¹²⁶ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013) p 109-110

Bundeskartellamt had a permanent staff of 180 members and made 1500 decisions in the first three years it existed.¹²⁷ Therefore from an institutional perspective German competition policy was very influential in shaping European competition law.

When drawn together then, the preceding sources seem to point towards the same conclusion. While there was French influence during the early formative years of EU competition law, the greatest influence was that of the German delegation and as a consequence the influence of the Ordoliberals. This also suggests, in reference to tying, that it was the German law against restraints (GWB) that was followed by the EEC Treaty. Particularly when there is suggestion that although the GWB was only adopted in 1957 the “essential components” were already in place by 1956.¹²⁸ Further it should be remembered that even those who consider the German influence to be overstated accept that the final provisions of the Treaty of Rome’s competition provisions represent a compromise between the delegations, with “the Germans having their way more than any other delegation”.¹²⁹ Therefore it appears that Ordoliberalism is the economic theory upon which Article 85 (now 102 TFEU) and its tying prohibition are based.

¹²⁷ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013) p 109-110

¹²⁸ Robert O'Donoghue, Jorge Padilla, *The Law and Economics of Article 102 TFEU* (Oxford, Second Edition, Hart Publishing 2013) p 59

¹²⁹ Pinar Akman, 'Searching for the long-lost soul of art.82 EC' (2009) 29 OJLS 267

7.0 Conclusion

It has been demonstrated that Ordoliberalism was formed at a time of failing democracy and ascending fascism. An economy with power concentrated in the hands of the few had helped undermine a weak democratic government. As a consequence the Freiburg school expounded a doctrine that required a strong state that used its strength to maintain the economic freedom of the people, the economic freedom of the entrepreneur. It was this economic freedom that would help maintain the conditions of political freedom. This would be protected by an economic constitution and where monopoly did persist it would be regulated by an independent monopoly office.

This thinking was welcomed in Germany at a time when laissez-faire capitalism was seen as insufficient by the German public and socialism was seen as undesirable by the victorious allied powers. As a consequence of their training, their respected positions, their general opposition to the Nazi regime and their careful planning and desire to rebuild Germany after the war, many Ordoliberals entered government and began to influence policy making directly. As a consequence of this both German competition law and EU competition law began to reflect aspects of Ordoliberal thought. This is also reflected in the law on tying.

The Ordoliberals placed importance on a number of principles. These include a strong democratic government using competition to control private economic power, the use of economically defined market states to aid in the application of law, the institution of an economic constitution to protect the *economic freedom* of the individual and where necessary an independent body to require those with market power to act 'as if' subject to competition.

In relation to the law on tying specifically, it has been shown that tying prohibitions existed prior to World War II in Germany. These prohibitions first came about through the use of very general principles of commercial law based on the German Civil Code that were applied by judges to business transactions that restricted economic freedom. At this point these transactions

were apparently based on moral standards rather than economic theory. After World War II the legal tradition of the United States began to have an impact on German competition law through the introduction of laws in the British and US allied zones. This brought with it the nomenclature that is associated with tying in Germany presently. Most significantly it has been argued that the EEC Treaty provisions on tying are essentially based upon the same foundation as the GWB provision against tying. As a consequence of this and the corroborating evidence discussed above this suggests that the EEC Treaty's competition delegations, negotiations and consequently provisions were influenced by Ordoliberal economists and lawyers, and therefore it is argued that the theoretical basis of early EU tying law is Ordoliberal in nature.

In relation to the thesis as a whole this chapter demonstrates that tying law in the EU was at its inception linked to the Freiburg school of thought. This is important because it establishes a link between Ordoliberalism and EU tying law and also gives a basis from which to analyse decisions of the Commission and the EU courts to see if and when they reflect Ordoliberal thinking. This in turn builds foundation from which to assess what the economic reasoning underpinning tying law is and whether that reasoning is valid.

Chapter Two

The Chicago School of Antitrust Analysis

1.0 Introduction

The Chicago School of antitrust analysis is a relatively modern School of thought beginning in the 1950s. Initially considered a lunatic fringe,¹ within a few decades, it became increasingly influential and its impact reached the US Supreme Court.² This chapter will explain how the Chicago School became a strong influence in US antitrust thinking and will explain the main substantive principles that have been expounded by its followers. The role of this chapter within the thesis is to provide a foundation for the evaluation of the decisions of the EU Commission and courts and to allow the author to compare the theoretical foundations of those decisions with the Chicago School's approach (along with Ordoliberalism and post-Chicago). Later chapters will demonstrate that the EU competition enforcement authorities show little evidence of following Chicago School thinking and, at times, expressly reject arguments that would be considered valid from a Chicago School perspective.

The first section of this chapter sets out the historical context of antitrust development within the United States. It will explain how antitrust law first began to be applied in the United States and the concerns that motivated its implementation. It will be seen that in the early stages of US antitrust development, the primary concern was for the opportunity and freedom of the US citizen to make their own way through their own labour and hard work. There was also a further concern that antitrust was intended to address, which was manifest in the congressional debate surrounding antitrust legislation,³ namely the protection of democracy from being undermined by private economic power.⁴ At this time competition was viewed as a natural order that had the consequence of producing a just society consonant with God's will and morality. US antitrust law then started to take on more economic thought

¹ Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 U.Pa.L.Rev 925, 931

² Michael S. Jacobs, *An essay on the normative foundations of antitrust economics* (1995) 74 N.C.L.Rev 219, 220, 236-237

³ See the Sherman Act, 26 Stat. 209, 15 U.S.C and particularly the Clayton Antitrust Act 1914 38 Stat. 730, 15 U.S.C.

⁴ It is interesting that in both Germany (see chapter one) and the United States one of the principle concerns associated with competition law/antitrust was the effect on democracy of powerful concentrations of economic power.

due to the work of the Harvard School of Antitrust analysis. This School⁵ argued that the structure of a market affected its performance and that concentration in industry resulted in inefficient markets. But this school of thought began to be challenged in the 1950s by a new line of thinking, the Chicago School.

The second section relates to the substantive elements of the Chicago School. It will be seen that the Chicago School sought to base antitrust law and policy exclusively upon the aim of economic efficiency and sought to understand the market by viewing the actions of market actors through price theory. They also believed that in an unregulated market there were few barriers to entry. It will be explained that these views meant that they argued against the hostility displayed by antitrust authorities towards resale price maintenance, predatory pricing, vertical integration and tying, arguing that such hostility was unwarranted as there was little a firm could do to on its own to increase their market power. Instead the Chicago School argued that only mergers that create monopolies and price fixing cartels should be pursued as a matter of antitrust policy. The importance of this section within the chapter is to set out the Chicago School's main principles and arguments so that they can be referred to in later chapters concerning the EU approach to tying. In later chapters where the approach of the EU Commission and courts is considered, the substantive principles provided here will be contrasted in order to demonstrate that EU jurisprudence does not follow a Chicago School line of thinking. In relation to the thesis this is an important step in finding out which economic theory or theories the Commission and courts rely upon in making their decisions.

Third and finally two elements of criticism of the Chicago School will be put forward. The first, the author's own criticism, argues that the work of certain

⁵ Lisa Gormsen, *The Parallels between the Harvard Structural School and Article 82 EC and the divergences between the Chicago school and post-Chicago Schools and Article 82 EC* (2008) 4 *European Comp Journal* 221; Michael S. Jacobs, *An essay on the normative foundations of antitrust economics* (1995) 74 *N.C.L.Rev* 219; William E. Kovacic, *The intellectual DNA of modern U.S. competition law for dominant firm conduct: The Chicago/Harvard double helix* [2007] *Colum. Bus. L. Rev.* 1; Lawrence A. Sullivan, Warren S. Grimes, *The Law of Antitrust: An integrated handbook* 9-10 (2nd ed. 2006)

Chicago scholars, such as Posner, advocate an interpretation of barriers to entry, particularly access to capital, which is narrow and ignores the potential for dominant firms to hinder market entry from firms that do not have significant access to capital. Posner argues that access to capital for example is not a barrier to entry, and that capital costs, in reality, make up a very small percentage of a manufacturer's costs. It will be argued that the facts of the market place as represented by Posner are open to alternative interpretation. The facts given by Posner can equally be interpreted to suggest that only those firms that are able to secure finance on favourable terms are willing to enter new markets or finance institutions will only lend to those who have sufficient resources to allow them to lend on favourable terms. This is relevant to the issue of tying because tying can be used to increase the amount of capital needed to enter a market, and therefore if access to capital is a barrier to entry this supports the view that tying can be used strategically to hinder entry into certain markets.

The second criticism will begin to explain how Chicago has come to be viewed by some as far more ideological and less logically and mathematically robust than first thought. It will also be explained that while Chicago was seen as mathematical and scientific, and tended to portray opponents as subjective and vague, this reputation, as early as the mid-1980s, began to be questioned⁶ and the theories of Chicago are now seen as more uncertain, taking into account that they are at least in part based on unproven assumptions. This second criticism leads into the next chapter which is on post-Chicago antitrust analysis. This criticism of the Chicago School is significant because it assists in demonstrating that there are economically justifiable reasons why the Commission and courts do not follow the Chicago School of antitrust analysis in their decisions.

⁶ Herbert Hovenkamp, *Antitrust Policy after Chicago*, (1985) 84 Mich. L. Rev. 213, 232; John J. Flynn, *The Misuse of Economic Analysis in Antitrust Litigation*, (1981) 12 Sw. U. L. Rev. 335, 339-40; Michael S. Jacobs, *An essay on the normative foundations of antitrust economics* (1995) 74 N.C.L.Rev 219, 234

2.0 Historical Context and Development 1880-1950

2.1. Historical Context

US antitrust analysis has gone through a number of stages in its development. Unlike the Freiburg School, the historical developments that have shaped American antitrust law have been researched and are well known.⁷ However, to paint a fuller picture of the context in which the Chicago School of thought originated and developed, the history of US antitrust must be briefly summarised. Without doing so, it is possible to miss the marked transition periods and to be under the false impression that antitrust in the United States has always been seeking to serve the same, or similar, goals.

The Sherman Act 1890⁸ was the first competition statute of the United States. It was a novel and monumental legislative instrument, but its creation was not spontaneous, either legally or in concept. Opinions of the US courts, like that of Justice Stephen Field in 1884, capture the zeitgeist before the Sherman Act was enacted. In one particular case,⁹ he emphasised the interrelationship between liberty, labour and property, and referred to the Declaration of Independence itself to support the ideal that it is a right to be able to pursue one's own happiness through lawful business and vocation.¹⁰ This opinion, and others like it at the time, sought to legally protect private opportunity as a right that was as essential to individual freedom as any other. But even at this early stage there were others who voiced concerns regarding the interference of the state favouring one group over another in acts of "misguided paternalism".¹¹ At this time competition itself was seen as the natural order. It was seen by many as essential, or to put it in the words of Walker, the first president of the American Economic Association:

⁷ James May, *Antitrust in the Formative era: Political and Economic Theory in Constitutional and Antitrust analysis, 1880-1918*, (1989) 50 *Ohio State Law Journal* 257, 259

⁸ Sherman Act 1890, 26 Stat. 209

⁹ *Butchers' Union Slaughter House & Live Stock Landing Co. V Crescent City Live-Stock Landing & Slaughter-House Co* 11U.S. 746, 754-60 (1884)

¹⁰ May (n 7) 264

¹¹ *ibid* 264-266

“...rightly viewed perfect competition would be seen to be the order of the economic universe, as truly as gravity is the order of the physical universe, and to be not less harmonious and beneficent in operation.”¹²

Further, academic and popular texts often stated that competition tended to produce results that were just and in accordance with God’s will and morality.¹³ So the original concern for competition was born of natural law. This belief meant that judges and the populous at large were concerned with two major issues at this time. First, the maintenance of economic liberty, including the competitive process, and second, the protection of the people from interference either from the government or private activity.¹⁴ This concern for the competitive process was further accelerated as industrialisation of the United States changed the pattern of business and production. Increased ability to produce combined with the ability to distribute effectively to larger areas meant that firms sought protection through mutual co-operation, including through mergers, cartels, pools,¹⁵ holding companies and “trusts”.¹⁶

This led to the Sherman Act in 1890, an act that gave legislative flesh to the concerns that had been brought before the courts in the preceding years. This was because, in the words of Senator Sherman himself:

“It is the right of every man to work, labour, and produce in any lawful vocation and to transport his production on *equal terms and conditions and under like circumstances*. This is industrial liberty and *lies at the foundation of the equality of all rights and privileges*”.¹⁷

¹² F. Walker, *Political Economy* (3rd ed 1888) 263

¹³ May (n 7), 271

¹⁴ *ibid* 283

¹⁵ Pools were arrangements between groups of firms to fix prices and divide business in order to maximise profits.

¹⁶ Trusts were a way of giving control over a number of competing firms to a board of trustees. These trustees were then able to use their power, should they choose, to reduce competition between those firms, < <http://www.britannica.com/EBchecked/topic/616563/United-States/77809/Industrialization-of-the-US-economy?anchor=ref612906>> accessed 19/08/2014; James May, Antitrust in the Formative era: Political and Economic Theory in Constitutional and Antitrust analysis, 1880-1918, (1989) 50 *Ohio State Law Journal* 257, 284

¹⁷ 2 *Cong Rec* 2461 (1890)

It is noteworthy from a developmental point of view that Congress delegated “extraordinary broad authority to the courts to develop a common law of competition.”¹⁸ This was to ensure antitrust law would suppress anti-competitive acts rather than a particular form of behaviour. The Sherman Act and later legislation intended to buttress antitrust law, such as the Clayton Act 1914,¹⁹ also produced a great deal of congressional debate focused upon the concern of private economic power controlling and subverting republican institutions. It was this concern for individual economic freedom and the potential misuse of private economic power that antitrust law in the United States was originally designed to address and not any particular view of economists.²⁰

2.2. The Harvard School of Antitrust Analysis

As the Sherman Act became more market and industry oriented, a line of thinking developed called the “Harvard structural School”²¹. However the exact identification of this school of thought is made more difficult by the number of names that have been given to the approach. These names include “the Harvard School of Industrial Organisation”,²² “structuralist”,²³ “industrial organisation”, the “traditional school”, or “traditionalist”.²⁴ What is known is that from the 1940s to the 1950s, a school of thought was flourishing that considered that there were many aims to competition law and that they were served by ensuring that the structure of the market was maintained in a

¹⁸ Gordon B. Spivack, *The Chicago School Approach to single firm exercises of monopoly power: a response*, (1983) 52 *Antitrust L.J.* 651, 651

¹⁹ The Clayton Act (Clayton Act 1914, 38 Stat. 731) was an antitrust Act that, unlike the Sherman Act, defined more precisely particular behaviours that were prohibited, often on the condition they lessened competition. Examples of such behaviour include price discrimination, exclusive dealing and tying

²⁰ May (n 7) 287

²¹ Gormsen (n 5) 222

²² Michael S. Jacobs, *An essay on the normative foundations of antitrust economics* (1995) 74 *N.C.L.Rev* 219, 227

²³ Barbara A. White, *Countervailing power- Different rules for different markets? Conduct and context in antitrust law and economics*, (1992) 41 *Duke L.J.* 1045, 1055

²⁴ William E. Kovacic, *The intellectual DNA of modern U.S. competition law for dominant firm conduct: The Chicago/Harvard double helix* [2007] *Colum. Bus. L. Rev.* 1, 23 (footnote 63); see also Lawrence A. Sullivan, Warren S. Grimes, *The Law of Antitrust: An integrated handbook* 9-10 (2nd ed. 2006); Also this school sometimes overlap with the “modern populist school”, which by no means aids clarity, see S. Jacobs, *An essay on the normative foundations of antitrust economics* (1995) 74 *N.C.L.Rev* 219, 220 and compare 227.

particular fashion.²⁵ Originally what has been described as “populist” models began to take on an element of economics²⁶ through the Harvard School mainly based around the Structure-Conduct-Performance (S-C-P) paradigm.²⁷ This approach suggested that the structure of the market affected the conduct and thus the performance of that market. So, for example, it argued that oligopolistic markets and overly concentrated markets were likely to produce anti-competitive behaviour.²⁸ Another facet of the Harvard School was that it believed market entry and barriers to entry were important as difficult market entry could lead to concentrated markets where collusion would be expected.²⁹

During the 1950s, however, a new line of thought began to develop in the United States: the Chicago School. This started under the direction of Aaron Director but also included Milton Friedman, George Stigler, Lester Telser, Harold Demsetz, John McGee, Ward Bowman, and Meyer Burstein.³⁰

2.3. The Origin of the Chicago School of Antitrust Analysis

The Chicago School started as part of the wider Chicago School of Economics. It was not intended from the outset to be a new school of antitrust,³¹ but rather started through the analysis of market behaviour and antitrust policy using price theory and the assumption that business men were rational profit maximisers.³² This was in contrast to the Harvard School of thought which used the S-C-P paradigm.³³ It largely developed out of a single research community and therefore shares many of the characteristics and adherents of the larger Chicago economics movement.³⁴ It grew from a small number of law and economics academics in Chicago grouped around Aaron

²⁵ Gormsen (n 5) 227

²⁶ Rowe, *The Decline of Antitrust and the Delusions of Models: The Faustian Pact of Law and Economics*, (1984) 72 GEO. L.J. 1511, 1560

²⁷ Gormsen (n 5) 222

²⁸ This led to policies that favoured high numbers of smaller firms in a market rather than a low number of big firms.

²⁹ *ibid* 223

³⁰ *ibid* 227

³¹ Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 U.Pa.L.Rev 925, 926

³² *Ibid* 928

³³ William H. Page, *The Chicago school and the evolution of antitrust: Characterization, antitrust injury and evidentiary sufficiency* (1989) 75 Va. L. Rev. 1221, 1231

³⁴ *Ibid* 1229

Director,³⁵ through repeated journal articles whereupon the members would cite each other.³⁶ This proved an effective strategy. While the school had been initially disregarded³⁷ by 1980 the arguments of Chicago were considered “persuasive”³⁸ with a perhaps over enthusiastic Judge Bork declaring only two years later that Chicago had won the “final and irreversible” victory.³⁹ While this view is may be biased, given that Bork was himself an ardent Chicago School scholar, even non-Chicago scholars accepted in 1981 that “regard for efficiency⁴⁰ [was] in the ascendancy”.⁴¹ By the late 1980s, Chicago was not only the dominant model, but Chicagoans could look to the Supreme Court⁴² and Justice Department Merger Guidelines⁴³ for evidence of its acceptance.⁴⁴

³⁵ Aaron Director personally published very little, but he is credited by the main Chicago School adherents with formulating the key ideas of the school and passing them on orally to students who went on to develop them, see; Richard A. Posner, ‘The Chicago School of Antitrust Analysis’ (1979) 127 U.Pa.L.Rev 925, 925-926

³⁶ William H. Page, The Chicago school and the evolution of antitrust: Characterization, antitrust injury and evidentiary sufficiency (1989) 75 Va. L. Rev. 1221, 1229 1230

³⁷ Richard A. Posner, The Chicago School of Antitrust Analysis (1979) 127 U.Pa.L.Rev 925, 931

³⁸ Michael S. Jacobs, An essay on the normative foundations of antitrust economics (1995) 74 N.C.L.Rev 219, 220

³⁹ Robert Bork, Emerging Substantive Standards-developments and need for change, (1982) 50 Antitrust L.J. 179, 181

⁴⁰ A key tenet of Chicago, see below.

⁴¹ Eleanor M. Fox, The Modernization of Antitrust: A new equilibrium, (1981) 66 Cornell L. Rev. 1140, 1140; see also Michael S. Jacobs, An essay on the normative foundations of antitrust economics (1995) 74 N.C.L.Rev 219, 221.

⁴² *FTC v. Indiana Fedn. of Dentists*, 106 S. Ct. 2009, 2018-20 (1986); *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 106 S. Ct. 1348, 1354-60 (1986); *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 105 S. Ct. 2847, 2857-59 (1985); *Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.*, 105 S. Ct. 2613, 2619-21 (1985); *NCAA v. Board of Regents*, 468 U.S. 85, 100-15 (1984); *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767-71, 775-77 (1984); *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 11-18 (1984) (majority); *Jefferson Parish*, 466 U.S. at 32-47 (O'Connor, J., concurring); *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752, 762-64 (1984); *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979); *Broadcast Music, Inc. v. Columbia Broadcasting Sys.*, 441 U.S. 1, 9-10, 19-21 (1979); *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 50-59 & n.21 (1977); *Illinois Brick C. v. Illinois*, 431 U.S. 720, 731-44 (1977); *United States Steel Corp. v. Fortner Enterprises*, 429 U.S. 610, 620-22 (1977); *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488-89 (1977). See Frank H. Easterbrook, ‘Workable Antitrust Policy’ (1986) 84 Mich. L. Rev. 1696, 1698 footnote 7 for a full list of cases that appear to have been influenced by Chicago School thinking.

⁴³ U.S. Department of Justice Merger Guidelines-1982, reprinted in 4 Trade Reg. Rep. (CCH) 13,102 (June 14, 1982); Robert Pitofsky, ‘New Definitions of Relevant Market and the Assault on Antitrust’ (1990) 90 COLUM. L. REV. 1805, 1808

⁴⁴ Michael S. Jacobs, An essay on the normative foundations of antitrust economics (1995) 74 N.C.L.Rev 219, 220, 236-237

Some commentators such as Bickel have suggested that the Chicago School gained credibility largely due to the fact that many economists and antitrust academics believed that economics had reached a point where behaviour could be judged mathematically as anti-competitive or not using economics.⁴⁵ Further he states that, “the certitude with which many of the [Chicago] economists expressed their conclusions and their reliance on various esoteric mathematical models were hard to rebut.”⁴⁶ Burns states that Chicago’s approach was founded on a “seemingly neutral economic model; it is logical, internally consistent, and easy to grasp”⁴⁷ and it gave clear definitive answers to questions that confused the judiciary for decades.⁴⁸ Therefore it appears that at least part of the success of the Chicago School was built upon the view that it was neutral, impartial and based on objective economic models. Simultaneously the Chicago School portrayed the work of those opposed to Chicago School thinking as: descriptive, metaphorical, casual with “eclectic forays into sociology and psychology”.⁴⁹ This gave the Chicago School great credibility and undermined those who disagreed with their policy arguments.

3.0 Substantive Elements of the Chicago School of Thought

Two of the most fundamental differences between the Chicago School of antitrust and previous schools (such as the Harvard School) is that it states that, first, economic efficiency⁵⁰ should be the exclusive goal of antitrust law.⁵¹

⁴⁵ David R. Bickel, ‘The Antitrust Division’s adoption of a Chicago School economic policy calls for some reorganisation: but is the division’s new policy here to stay?’ (1983) 20 Hous. L. Rev. 1083, 1088

⁴⁶ David R. Bickel, ‘The Antitrust Division’s adoption of a Chicago School economic policy calls for some reorganisation: but is the division’s new policy here to stay?’ (1983) 20 Hous. L. Rev. 1083, 1088, 1098

⁴⁷ Jean W. Burns, Challenging the Chicago School on Vertical Restraints (2006) Utah L. Rev. 913, 913, italicised for emphasis

⁴⁸ Ibid 913

⁴⁹ Richard A. Posner, ‘The Chicago School of Antitrust Analysis’ [1979] 127 U. Pa. L. Rev. 925, 928-929

⁵⁰ Consisting of allocative efficiency and productive efficiency

⁵¹ Michael S. Jacobs, An essay on the normative foundations of antitrust economics (1995) 74 N.C.L.Rev 219, 227; Herbert Hovenkamp, ‘Antitrust Policy After Chicago’ [1985] 84 Mich.L.Rev. 213, 226; Bork even suggests that and the legislative history of the United States antitrust law supports the pursuit of this narrow goal, see Robert Bork, *The Antitrust Paradox* (New York, The Free Press 1978) 50-51, 91

Second, the best tool for assessing economic efficiency in the real world is price theory.⁵² Chicago argued that antitrust enforcement was hostile to business practices, many of which were merely novel and not actually damaging. Using price theory they sought to evaluate behaviour and ascertain whether or not it affected output and price.⁵³ As a result of using this theory many actions that had previously been considered monopolistic,⁵⁴ they considered to have normal, rational efficiency reasons for being pursued.⁵⁵ As a result this presented previous antitrust enforcement as harsh, over-zealous and out of tune with business thinking. This new, seemingly scientific approach appeared more desirable than the previous Harvard thinking that had been dominant.⁵⁶

Easterbrook, a member of the Chicago School himself, described the Chicago School as having a number of central tenets. He put forward following eight points:

“(1) No antitrust policy should be based on a belief that atomistic competition is better than some blend of cooperation and competition. The right blend varies from market to market.

(2) No antitrust policy should be based on a belief that courts and other institutions of government can identify the "best" structure of a market...

(3) Competition is harder than you think...

(4) Practices that look monopolistic (because they involve cooperation) may be beneficial...

⁵² Herbert Hovenkamp, 'Antitrust Policy After Chicago' [1985] 84 Mich.L.Rev. 213, 226

⁵³ Michael S. Jacobs, An essay on the normative foundations of antitrust economics (1995) 74 N.C.L.Rev 219, 229, 230; Herbert Hovenkamp, 'Antitrust Policy After Chicago' [1985] 84 Mich.L.Rev. 213, 226

⁵⁴ Specific types of behaviour will be considered later.

⁵⁵ William H. Page, The Chicago school and the evolution of antitrust: Characterization, antitrust injury and evidentiary sufficiency (1989) 75 Va.L.Rev. 1221, 1231

⁵⁶ However with time appearance of scientific proof began diminish. Some as early as 1983 noted that the Chicago School's approach did not take into account all the facts, ignoring those that did not fit or that could not be effectively measured, see David R. Bickel, The Antitrust Division's adoption of a Chicago school economic policy calls for some reorganisation: but is the division's new policy here to stay?, (1983) 20 Hous. L. Rev 1083, 1104; Schmalensee, On the use of economic models in Antitrust: The RealLemon Case, (1979) 127 U. Pa. L. Rev. 994, 1043. Some of these arguments will be considered below and in the next chapter on "Post-Chicago".

(5) No antitrust policy may safely disregard the survival of complex practices. We may not know what these practices do, but survival in the face of other practices and products indicates that they serve some function...

(6) No question should be answered without adequate data...

(7) Until we know what a durable business practice does, no one should prohibit the use of that practice...

(8) Until we know the costs of alternative forms of regulation, we should be patient. It is never right to compare the visible costs of reality against a presumed cost-free substitute. Every program has costs, and government failures may be more troubling than market failures because no competitive pressures automatically undermine government failures.”⁵⁷

These principles are all quite abstract however, but in practice these elements work to provide a number of arguments on how competition law should be directed.

3.1. The Purpose of Antitrust Law

As already mentioned the Chicago school of thought does not believe that there is a purpose for antitrust beyond the promotion of economic efficiency.⁵⁸

The fact that Chicago scholars have argued that it is within the original intent of congress to pursue efficiency as a single goal has come under strong criticism,⁵⁹ but since this has already been dealt by others⁶⁰ and relates more to US antitrust policy than antitrust norms, it will not be dealt with here. However, it is important when considering the aims of Chicago to remember that it considers the only legitimate aim of competition law to be economic efficiency. As consequence this “implies accepting ... that sometimes one large firm is best, when that firm can produce most cheaply ... [and that]

⁵⁷ Frank H. Easterbrook, ‘Workable Antitrust Policy’ (1986) 84 Mich. L. Rev. 1696, 1700

⁵⁸ This is not to say that EU competition law has embraced or endorsed this approach, but this view is submitted by Chicago School scholars.

⁵⁹ Charles Brown, for example, commented on Robert Bork, an ardent Chicagoan; “often his scholarship seems less a search for original intent in the Sherman Act by a man employing judicial restraint than it does the jettisoning of two thirds of the federal antitrust statutes and at least half of all antitrust law precedents”; Charles G. Brown, Borkian Antitrust economics and the ‘Chicago School’: A Judicial draining of America’s entrepreneurial spirit, (1987) 19 Antitrust L.& Econ. Rev. 29

⁶⁰ Gordon B. Spivack, The Chicago School Approach to single firm exercises of monopoly power: a response, (1983) 52 Antitrust L.J. 651, 652-4

atomistic competition may not be as efficient as other market structures".⁶¹ As such they submit that artificial protection of competitors is inconsistent with competition.⁶²

3.2. Barriers to Entry

One of the main pillars that holds up the Chicago theory is that there are no, or few, artificial barriers to entry in new markets.⁶³ Easterbrook states that monopoly prices attract new competitors to the market and that if this does not happen the answer is not that there has been anticompetitive conduct but rather that judges and/or litigants have misunderstood the practice.⁶⁴ This has far reaching consequences if true. After all, if firms cannot erect artificial barriers to entry then essentially almost any form of unilateral behaviour conducted by a firm will fail to exclude firms from the market for any real length of time.⁶⁵ Consequently, Chicago School scholars believe that there are few situations in which a firm can "obtain or enhance monopoly power by unilateral action"⁶⁶

3.3. Cartels and Price Fixing

The Chicago School stipulation that there are few barriers to entry has further consequences too. If there are no barriers to entry then even firms with great monopoly power or cartels will cause no real problem, because as soon as the monopolistic firm or the cartel raises prices above a certain level, this will attract new market entrants which will cause the price to drop down to the appropriate level.⁶⁷ They also believe that cartels were highly unstable due to

⁶¹ Frank Easterbrook, *The Chicago School and Exclusionary Conduct* (2008) 31 *Harvard Journal of Law and Public Policy* 439, 440

⁶² David R. Bickel, *The Antitrust Division's adoption of a Chicago school economic policy calls for some reorganisation: but is the division's new policy here to stay?*, (1983) 20 *Hous. L. Rev.* 1083, 1089

⁶³ Gormsen (n 5)

Also see Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 *U.Pa.L.Rev.* 925, 928 where Posner describes barriers to entry as 'colourful characterisations' which take the place of logical structure of economic theory

⁶⁴ Frank Easterbrook, *The Chicago School and Exclusionary Conduct* (2008) 31 *Harvard Journal of Law and Public Policy* 439, 442

⁶⁵ Unilateral behaviour will be covered in the sections following.

⁶⁶ Richard A. Posner, 'The Chicago School of Antitrust Analysis' [1979] 127 *U. Pa. L. Rev.* 925, 928

⁶⁷ See Black, Jones, *In Defence of Antitrust*, (1965) 65 *Colum. L. Rev.* 377 and David R. Bickel, *The Antitrust Division's adoption of a Chicago school economic policy calls for some*

the tendency of members to cheat and the inability to prevent the entry of new firms into the market, as such cartels would rarely succeed and cost too little to warrant public pursuit.⁶⁸ With this in mind it may be asked, from the view point of the Chicago School, what is the point of having any antitrust law, since even cartels are not a serious long term threat to competition? Stigler carried out work studying when the benefits of collusion (to a cartel firm) exceeded the costs of preventing cartel members cheating, again using price theory as the tool of analysis.⁶⁹ He suggested that tacit collusion would only be a problem in a market subject to very high levels of concentration. This gave way to an accepted Chicago position that only explicit price fixing and mergers that would create monopolies or near monopolies were worthy of the authorities' attention.⁷⁰ Easterbrook says that "the central purpose of antitrust is to speed up the arrival of the long run."⁷¹ So even though in theory even price fixing cartels would be undermined by market entry, eventually Chicago scholars settled that explicit pricing fixing and very large horizontal mergers were worth "serious concern".⁷² Therefore they favour "little other than prosecuting plain vanilla cartels and mergers to monopoly".⁷³

3.4. Resale Price Maintenance

According to Posner, a leading Chicago scholar, resale price maintenance should not be viewed as a way of manufacturers giving vendors a monopoly profit and as such is not harmful to competition or consumers.⁷⁴ He viewed such an aim as irrational from the point of view of the manufacturer and that resale price maintenance must serve some other function for the manufacturer. Posner suggested that by preventing price competition among dealers, dealers would offer other services instead in order to add value. For example, the retailer may offer point of sale advertising, show room display,

reorganisation: but is the division's new policy here to stay?, (1983) 20 Hous. L. Rev 1083, 1104

⁶⁸ Richard A. Posner, 'The Chicago School of Antitrust Analysis' [1979] 127 U. Pa. L. Rev. 925, 932

⁶⁹ George Stigler, *The organisation of industry* (University of Chicago Press 1968)

⁷⁰ For example, for Robert Bork's expression of antitrust enforcement priorities see; Robert Bork, *The Antitrust Paradox* (New York, The Free Press 1978) 405-406

⁷¹ Frank H. Easterbrook, 'The Limits of Antitrust' (1984) 63(1) Tex. L. Rev. 1, 2

⁷² Richard A. Posner, 'The Chicago School of Antitrust Analysis' (1979) 127 U.Pa.L.Rev 925, 932, 933

⁷³ Frank H. Easterbrook, 'Workable Antitrust Policy' (1986) 84 Mich. L. Rev. 1696, 1701

⁷⁴ Richard A. Posner, 'The Chicago School of Antitrust Analysis' [1979] 127 U. Pa. L. Rev. 925, 926-927

knowledgeable sales personnel etc. He suggested such services may not be offered if there was a risk of retailers “free-riding”. That is, for example, where a retailer may undercut the price of other retailers while expecting those other retailers to provide presale services to the customer.

3.5. Predatory Pricing

Posner did not consider that predatory pricing should be regulated by the competition authorities. In his view, predatory pricing was unprofitable. He argued that even in the long run, predatory pricing would not be an effective strategy for increasing market share.⁷⁵ The predator would lose money during the period of selling below cost and when they try to raise prices later, when the competitor had been driven from the market, new entrants would be drawn into the market by the high prices. The price would then be forced down to the competitive level and the predator would essentially be back in their original position, albeit now with the losses incurred during the period of predation.

⁷⁵ Richard A. Posner, ‘The Chicago School of Antitrust Analysis’ [1979] 127 U. Pa. L. Rev. 925, 927

3.6. Vertical Integration

Vertical integration is also deemed to be for reasons other than monopoly. If a monopoly producer takes over a distribution network they cannot earn monopoly profits at both the production and manufacturing level. Since the product and its distribution are complementary, increasing the price of distribution, when the production is already sold at the optimum monopoly price would have the consequence of reducing demand. Two monopoly profits could not be obtained. As a consequence, Chicago Scholars postulate that vertical integration must be carried out for other reasons than the desire for additional monopoly profits.⁷⁶

3.7. Tying

The views of the Chicago School that have greatest relevance to this thesis are those on tying. There were a number of reasons why, prior to the Chicago School, tying had been argued to be illegal in the United States' courts. One of these regards what has become known as 'leverage theory'. The concept of leverage theory is as follows: a company has a monopoly in good 'A'. It also produces good 'B' but the market for good B is competitive. By tying good 'A' to good 'B' the monopolist is therefore able to extend their monopoly over two markets. Therefore the monopolist obtains the ability to charge super-competitive prices in two markets and earns two monopoly profits. The potential for extending a monopoly unduly was expressed in various US cases⁷⁷ and the discussion of preventing the extension of monopoly at one point "dominated" the US Supreme Court's analysis of tying cases.⁷⁸ This reasoning based on leverage theory appeared to go unchallenged for a number of years as shown by its citation in the Report of the Attorney General's Committee to Study the Antitrust Laws in 1955, where it said that tying contracts were for "monopolistic exploitation" and "artificially extending

⁷⁶ Richard A. Posner, 'The Chicago School of Antitrust Analysis' [1979] 127 U. Pa. L. Rev. 925, 927

⁷⁷ See *Carbice Corp. of America v American Patent Development Corp* (1931) 283 U.S. 27, 30-32; *Mercoid Corp. v Mid-Continent Investment Co.* (1944) 320 U.S. 661, 667; Keith K. Wollenberg, 'An Economic Analysis of Tie-In Sales: Re-examining the Leverage Theory' (1986-1987) 39 Stan. L. Rev. 737, 740

⁷⁸ Keith K. Wollenberg, 'An Economic Analysis of Tie-In Sales: Re-examining the Leverage Theory' (1986-1987) 39 Stan. L. Rev. 737, 740

the market for the ‘tied’ product”.⁷⁹ However, Bowman, a Chicago scholar, in a seminal article, criticised this approach and argued that the idea of extending a monopoly into another market (whereby production can be reduced and prices increased) needed to be reevaluated.⁸⁰ He evaluated five tying situations⁸¹ and found that only in one of them was there the possibility to create another monopoly in the tied product. This is when the two products are complements so that a change in the price of one affects the sales of the other.⁸² This rejection of the traditional leverage theory was taken further again by Posner⁸³ and Bork,⁸⁴ who stated that tying was simply not a rational way to acquire a second monopoly profit. For this, Posner gives the following illustration:

“If one takes two products, such as a mimeograph⁸⁵ machine and ink, the consumer will not consider the distribution of cost relevant. What they will be looking at is the price of buying a mimeographing service.⁸⁶ A rise in the price of one element will be seen as an increase in the cost of the service as a whole. If the machine is priced at the optimal monopoly level in the first place any further increase in the cost of the tied product (the ink) will push the price of the service as a whole above the optimal monopoly level and as a consequence will lower the monopolist’s profits. On this basis there is little point in pursuing tying arrangements for anticompetitive reasons and therefore they should not be forbidden”.

⁷⁹ Report of the Attorney General’s National Committee to Study the Antitrust Laws (1955) 145

⁸⁰ Ward S. Bowman, ‘Tying arrangements and the leverage problem’ (1957-1958) 67 Yale L.J. 19, 20

⁸¹ Evasion of price regulation, single product discrimination (a counting device), product complementarity in a variable proportion context, technological interdependence, economies of joint production or sale.

⁸² Ward S. Bowman, ‘Tying arrangements and the leverage problem’ (1957-1958) 67 Yale L.J. 19, 25-27; an example of complementary products could be a particular type of engine (product A) that only works with a particular type of gear box (product B). Assuming each gearbox would need an engine and every engine a gear box products A and B would be complements.

⁸³ Richard A. Posner, ‘The Chicago School of Antitrust Analysis’ [1979] 127 U. Pa. L. Rev. 925, 929

⁸⁴ Robert Bork, *The Antitrust Paradox* (New York, The Free Press 1978) 372-373

⁸⁵ A low cost printing press

⁸⁶ Richard A. Posner, ‘The Chicago School of Antitrust Analysis’ [1979] 127 U. Pa. L. Rev. 925, 929

If this view of tying is correct, then almost any sort of tie is irrelevant from an antitrust point of view. Any tie will merely alter the customers' decision from "from whom do I buy product A and product B" to "from whom do I buy system X" (system X being a combination of products A and B). The customer will merely change the calculation from the price of two units to one system and compare them accordingly. If there is a non-tied combination of the products that is superior in quality, then the consumer will purchase those. The inference of this is that a dominant firm will not be able to obtain any greater profit by tying than by selling their monopolised product individually. In chapter three it will be shown that this view of tying is oversimplified and there are ways in which tying can be used to raise prices. There are also other anti-competitive effects that can be caused by tying beyond increases in price that will be discussed in chapters three⁸⁷ and four.⁸⁸

4.0 Criticism of the Chicago School of Antitrust Analysis

4.1. Barriers to Entry

As already mentioned the Chicago Scholars do not believe that there are many genuine barriers to entry. This raises the question of whether or not barriers to entry do or do not exist. Excluding government sanctioned barriers, the following are generally considered barriers to entry: sunk costs, economies of scale, essential facilities (including access to capital), privileged access to supply, a well developed sales network, advertising, network effects⁸⁹ and intellectual property rights.

In the context of tying access to capital is particularly important. This is because if access to capital is not a barrier to entry then any commercial behaviour employed by a dominant firm that makes market entry require greater amounts of capital is not harmful to competition. Correspondingly if access to capital is a barrier to entry then behaviour, such as tying, may make

⁸⁷ See: Chapter three, subheading: Tying Theories

⁸⁸ See: Chapter four, subheading: Combined benefit versus individual benefit to the consumer

⁸⁹ Richard Whish, *Competition Law* (6ed, OUP, 2009) 180-181

access to the market more difficult if it means that new entrants require much greater capital reserves. Therefore it is important to consider whether the arguments raised by Chicago School in this regard are accurate.

In relation to access to capital Posner states the following:

“...Suppose that it costs \$10,000,000 to build the smallest efficient plant to serve some market; then, it was argued, there is a \$10,000,000 "barrier to entry," a hurdle a new entrant would have to overcome to serve the market at no disadvantage vis a vis existing firms. But is there really a hurdle? If the \$10,000,000 plant has a useful life of, for example, ten years, the annual cost to the new entrant is only \$1,000,000. Existing firms bear the same annual cost, assuming that they plan to replace their plants. The new entrant, therefore, is not at any cost disadvantage after all.”⁹⁰

And while Posner accepts that a higher premium to obtain capital than existing firms may be one genuine disadvantage to new entrants⁹¹ he continues to say that he does not believe that such a difference would be sufficient to stop firms entering a market where there is a monopoly profit being charged. He argues that in most cases, interest and profit are not more than ten percent of a manufacturing firm's sales price and they are usually a lot less.⁹² Further he states that the risk premium is less if the entrant is a firm which is already established in other markets, which he considers often to be the case.⁹³

It is argued that this view is overly simplistic and falls short of the reality of business practice. To begin, most individuals⁹⁴ simply would not be able to get finance for such an expensive project. It would be unlikely that an individual would be able to raise funds for an initial investment of \$5,000,000, let alone

⁹⁰ Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 U.Pa.L.Rev 925, 929-930

⁹¹ *Ibid* 933; on Oliver Williamson: Williamson, *Book Review*, (1974) 83 Yale L.J. 647, 656-59

⁹² *ibid* 946

⁹³ *ibid* 946

⁹⁴ The term "individual" here merely indicates a single person or small firm that is not already established in any other market.

\$10,000,000. After all in every business venture there is an innate risk, even if it is entirely due to external factors such as the risk of a market down turn. Therefore since individuals are unlikely to have \$10,000,000 in capital, and it would not be easy to raise such funds unless they had assets worth \$10,000,000 to which a loan could be fixed. So immediately to compete within a market that requires \$10,000,000 initial investment is not possible for individuals. This means for those who are not part of a firm with substantial assets, the inability to raise \$10,000,000 in finance is in itself a barrier to entry. Posner partially acknowledges this when he said that new entrant firms are usually established in other markets. There is no reason why individuals and relatively new firms would not want to enter new markets, but the fact that it is usually only firms well established in other markets that do so suggests that this is because they are the only firms able to acquire the requisite finance in the first place.

Posner also argues that the interest paid by firms is usually much lower than 10% of a manufacturing firm's sales costs.⁹⁵ Assuming this is true, the manner in which he interprets this fact is rather narrow. His argument appears to suggest that because most firms pay substantially less than 10% in interest costs, that market entry is unlikely to be hindered by such a small element of their costs. This fact can easily be viewed in another fashion. Assuming Posner is correct and the vast majority of firms spend far less than 10% on capital costs, this could equally indicate that any firm that would need to spend near or above 10% of its cost price on finance would consider such a venture unviable and therefore either the firm would choose not to enter that market, or the firm would be unable to find a source of funding that would provide capital on such terms because financiers themselves would view the venture as unviable.⁹⁶

This may be particularly true if it is difficult to ensure the new entrant will have time to recoup their sunk costs. The problem of ensuring sufficient time to recoup sunk costs has been illustrated by Baker. Using Chicago's own

⁹⁵ Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 U.Pa.L.Rev 925, 946

⁹⁶ Perhaps due to the risk the incumbent monopolist could lower their prices in response to entry.

standard of a rational profit maximising firm, he argues that a firm will not enter a market, regardless of how high the super-competitive profits are, if the post-entry price will not remain high enough for long enough for that firm to recoup their sunk costs.⁹⁷ Therefore, if a dominant firm convinces those who have the potential to enter the market, that such entry will lead to a rapid decrease in price, this would make it unpalatable for the rational business to enter the market. This applies even if the pre-entry price is monopolistic. This threat can take the form of a number of behaviours, not least excess capacity, high levels of advertising and contract provisions to meet the price of offers from rival firms.⁹⁸ This behaviour incurs costs, but such costs will be off-set by the super-competitive prices the firm can charge when their competitors refuse to enter the market because they are aware that the incumbent would respond by causing a rapid decrease in price.

Therefore the level of interest a new entrant would have to pay is important because assuming a monopolist has either little debt or lower interest capital costs, the higher the interest premium a new entrant pays for their access to capital, the higher the price a monopolist firm can charge while still preventing the new entrant from making profit.

For example:

Monopolist sells product A at £80 but drops the price to £52 on arrival of a new entrant (£48 costs, £2 profit £2 servicing capital)

New entrant sells product A at £53 (£48 costs, £5 servicing capital £0 profit)

This issue of access to capital is particularly relevant to tying. This is because if capital is difficult to access, the larger the initial outlay required to enter a market, the fewer the number of firms that are likely to have access to sufficient capital. As a consequence, if a dominant firm can make the initial

⁹⁷ Jonathan B. Baker Recent developments in economics that challenge Chicago School views (1989) 58 Antitrust L.J 645, 652

⁹⁸ *ibid* 652

investment needed to enter a market as high as possible for potential entrants, this will minimise the number of entrants able to enter the market.

A dominant firm may try to use tying to increase the capital required to enter a market. If the tied goods are complements, or if the vast majority of customers require both elements of the tie, then tying the goods together would mean that, in the absence of independent suppliers of the tying good, an entrant into the market may have to enter both markets simultaneously. As a result, a tie may make the initial investment required to enter a market higher as new entrants would have to invest in the capacity to make both the tying and the tied complement from the outset. If the tying product is expensive to replicate this could add substantial costs. When combined with an entrant needing to be aware of the monopoly profits in the first place, which may not be easy if the market is not transparent,⁹⁹ such behaviour may severely limit the number of firms that are able to enter a market, even when monopoly costs are being charged. Therefore it is argued that the Chicago School view on access to capital does not consider all the potential interpretations of the facts, and therefore ignores how through the use of tying, a dominant undertaking may be able to hinder market entry.

4.2. Challenges to the Chicago School

Before moving on from the Chicago School to consider post-Chicago antitrust analysis in Chapter Three, it is important to consider how Chicago has been viewed more recently. At the start of this chapter, it was noted how the Chicago School's success was facilitated by the appearance that it was based on sound objective principles that could be proven mathematically. More recently this has been challenged. One of the criticisms levelled at the Chicago School is that it is in fact more ideological than originally thought. Taking for example the matter of judicial capacity; Easterbrook noted how, in principle, there is unilateral conduct that can exclude competitors without increasing market efficiency, but claims that it is not possible to know when

⁹⁹ A transparent market is used here to mean one where the cost of materials, research development and/or other market information (customer base size) is not transparent, widely known or cheaply available.

this is happening.¹⁰⁰ He goes on to say that even when there is a competitive failure, that does not show that regulation is better, or could do better.¹⁰¹ Instead, he argues that business practices should be left to themselves until their effect is truly known, as in his opinion, interference is likely to cause greater loss of economic efficiency than the practice itself.¹⁰² This approach is noted by Jacobs who states that the Chicago School, “acknowledges the existence of informational and other market imperfections,”¹⁰³ but believe judicial consideration would only confuse matters. This assumption is of course a value judgement. Deciding whether or not judges or markets are better at dealing with unilateral behaviour which, even Chicago accepts can exist, depends upon whether the view taken of the market is optimistic or pessimistic, and whether the same is true of judicial ability.¹⁰⁴ Jacobs further states that, “...like other scientists, antitrust economists may wish to deny the subjectivity of their enterprise,”¹⁰⁵ and, “...the practical impossibility of resolving these fundamental factual questions has effectively disguised an ideological argument as a seemingly scientific one.”¹⁰⁶

This has led to criticism that the Chicago School holds ideological beliefs that are out of touch with empirical and moral roots and that it seeks to implement its own agenda.¹⁰⁷ Hovenkamp agrees stating in a far more blunt fashion that some commentators now, “...regard this Chicago School claim of freedom from political interest with a good deal of scepticism, and some believe it to be simple hogwash, or perhaps even a cover for a very strong, pro-business political bias that works to the benefit of the rich.”¹⁰⁸ Therefore it is now a far more widely held view that some of the foundational tenets of the Chicago School are based upon value judgements such as the inability of the judiciary to deal with competitive problems effectively and the superiority of the market

¹⁰⁰ Frank Easterbrook, *The Chicago School and Exclusionary Conduct* (2008) 31 *Harvard Journal of Law and Public Policy* 439, 443

¹⁰¹ *ibid* 443

¹⁰² Frank Easterbrook, *Workable Antitrust Policy*, 84 *Mich. L. Rev* (1986) 1696, 1701

¹⁰³ Michael S. Jacobs, *An essay on the normative foundations of antitrust economics* (1995) 74 *N.C.L.Rev* 219, 243

¹⁰⁴ *ibid* 251

¹⁰⁵ *ibid* 265

¹⁰⁶ Michael S. Jacobs, *An essay on the normative foundations of antitrust economics* (1995) 74 *N.C.L.Rev* 219, 259

¹⁰⁷ *ibid* 234; John J. Flynn, *The Misuse of Economic Analysis in Antitrust Litigation*, (1981) 12 *Sw. U. L. Rev.* 335, 339-40

¹⁰⁸ Herbert Hovenkamp, *Antitrust Policy after Chicago*, (1985) 84 *Mich. L. Rev.* 213, 232

to correct for competition based deficiencies effectively over time. This has led to further criticism aimed at both their general values and also specific arguments about particular business practices. These will be explained in the next chapter on post-Chicago analysis.

5.0 Conclusion

This chapter has set out the historical context of antitrust development within the United States. It has explained that, even before the enactment of the Shearman Act in 1884, the courts of the United States were making decisions to protect the liberty to work and sought to defend private economic opportunity. At this time, the primary concern was for the opportunity and freedom of the citizen to use their effort and labour to produce and provide for themselves. The ideal of competition was viewed as a natural order that had the consequence of producing a just society. It was also evident from the congressional debate on the Sherman Act, and particularly the Clayton Act, that the regulation of competition through legislation was intended to address a further concern, namely, the protection of democracy from being undermined by private economic power, such as powerful corporations that were being formed by combining (in various ways) competitors into virtual monopolies. Over time greater study of antitrust gave rise to the Harvard School. This largely focused on the structure of a market, as it was believed that this affected the conduct of those in the market and consequently impacted upon their performance. During the 1950s however the Chicago School began to emerge, arguing that the focus for antitrust should exclusively rest upon economic efficiency and that the market should be understood through price theory. They also believed that in an unregulated market there were few barriers to entry. These views meant that they argued against the pursuit by antitrust enforcement authorities of many business practices including tying, resale price maintenance, predatory pricing, and vertical integration. In their view, these business practices did not increase the market power of the firm implementing them, even if they held a dominant position in the relevant market. Instead the Chicago School argued that only mergers that created monopolies and price fixing cartels should be pursued as a matter of antitrust policy.

It has been argued that this view of barriers to entry is not necessarily reflective of reality. With particular reference to access to capital, it has been argued that the facts of the market place as represented by Posner are open

to alternative interpretations. Posner asserts that most firms' capital costs make up only a small fraction of their overall costs and that most market entrants are already well established in other markets (allowing them to secure loans on assets already held). Posner interprets these facts to mean that access to capital is not a hindering factor for market entrants because it constitutes such a small amount of their costs. An alternative interpretation of these facts has been put forward. It has been argued by the author that only those firms that are able to secure finance on favourable terms are willing to enter new markets and/or finance institutions will only lend to those firms that already have sufficient resources to allow them to lend on favourable terms. This being the case, capital access may be a real barrier to entry which, as will be discussed later, may have an impact on the strategic use of tying to exclude entry into certain markets.

Finally, it has been explained that while Chicago was seen as mathematical, scientific and tended to portray opponents as subjective and vague, there are a number of commentators who have questioned this veneer and suggested that Chicago School theories are based on unproven assumptions, such as the inability of courts to make interventions that improve the functioning of the market. These issues have only been covered in brief in this chapter as they will be dealt with in greater detail in the following chapter on post-Chicago analysis.

In relation to the thesis as a whole this chapter explains the substantive elements of the Chicago School so that later chapters, that evaluate the theoretical foundations of the decisions of the EU Commission and courts, can be compared with Chicago School theory. This will demonstrate that despite the widespread influence of the Chicago School in US antitrust law, with regard to tying, the EU competition enforcement authorities do not follow the Chicago School and at times appear to expressly reject arguments and interpret facts in a manner that is contrary to Chicago School thinking. This chapter also challenges some of the arguments advanced by Chicago Scholars that relate to access to capital and indirectly tying.

Chapter Three

Post-Chicago Antitrust Analysis

1.0. Introduction

This chapter investigates post-Chicago antitrust analysis. The purpose of this chapter is to set out what general principles are followed by post-Chicago scholars, and also their contribution to economic thought in relation to tying. The general principles and tying models that are set out here will in later chapters be contrasted with the approach of the EU Commission and courts. This is important as it will be shown in Chapter Seven that these very same models of tying have been incorporated into the soft law of the EU through the Commission's Guidance on its enforcement priorities in applying Article 102 TEFU.¹ Further it will be seen in Chapter 5 and Chapter 7 that the EU tying approach is increasingly making use of post-Chicago principles and their style of analysis, not just their models of harm. This chapter sets a foundation upon which later chapters will build to demonstrate that EU tying law is now based not only upon Ordoliberal principles but increasingly it has also started to combine these principles with post-Chicago economic theory.

This chapter is set out as follows: First, the historical setting will be set out. The purpose of this is to show how Chicago School principles began to be challenged and undermined by post-Chicago analysis. Second, the general principles of post-Chicago will be advanced. It will be seen that post-Chicago scholars tend to investigate the individual aspects of each market to find if/when anti-competitive conduct is possible, rather than creating general rules that are applied very broadly to almost any market. It will be shown that new economic theories that go beyond price theory are used by post-Chicago scholars to analyse the impact of different types of behaviour on a particular market. This is important as, later, this style of analysis will be shown to be reflected in recent EU tying decisions. Third, the work of post-Chicago that relates specifically to tying will be explained. It will be shown that a number of economic models have been developed that show how, under certain conditions, tying can be used successfully to exclude competitors from a market. This element is important for two reasons: it will set out tying models

¹ Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02

which will later be seen to be used in the EU Guidance in relation to tying,² and it will demonstrate that there are economically justifiable reasons for tying being pursued as an anti-competitive practice under certain circumstances. Fourth, the criticism that has been put forward against post-Chicago theories will be considered. It will be shown that the majority of the criticism of post-Chicago principles and models has not alleged that they are flawed economically but rather has argued that the theories cannot be translated into justiciable rules and practically applied by courts. This author will argue in response that convincing models for the application of post-Chicago analysis have already been put forward by commentators³ and there is no reason to prevent such theories from being applied in court. This again is to demonstrate that there are economically valid reasons why tying should and can be challenged by the courts and competition authorities.

1.1. The shifting influence from Chicago to post-Chicago

In 1982, Robert Bork, a fierce proponent of Chicago, felt that he was able to say that the Chicago approach was so widespread that it had intellectually won the “final and irreversible victory”.⁴ Yet Pierce states: “Ironically, during the same period⁵ in which the [US Supreme] Court was changing anti-trust law to reflect the writing of the Chicago scholars, a new group of scholars began to produce an impressive body of literature that is referred to as post-Chicago economics.”⁶ Despite claims that the purpose of post-Chicago is to enrich the older Chicago theory by providing alternative strategic explanations,⁷ much of the “norm-oriented” perspective of the Chicago School,

² Commission, ‘Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings’ (Communication) (2009) OJ C 45/02

³ See particularly: Kai-Uwe Kühn, Robert Stillman, Cristina Caffarra, ‘Economic theories of bundling and their policy implications in abuse cases: an assessment in light of the Microsoft case’ (2005) 1 Eur.Competition.J 85 and to a lesser extent; Christian Ahlborn, David S. Evans, A. Jorge Padilla, ‘The antitrust economics of tying: a farewell to per se illegality’ (2004) 49 Antitrust. Bull 287, 338

⁴ Robert Bork, ‘Emerging Substantive Standards-developments and need for change’ (1982) 50 Antitrust L.J. 179, 181

⁵ Pierce indicates that the period the court was changing the law to reflect Chicago School thinking was from the late 1970s to the 1990s

⁶ Richard J. Pierce, ‘Is Post-Chicago Economics Ready for the Court Room?’ [2001] 69 Geo.Was.L.R. 1103, 1106

⁷ Joseph F. Brodley, ‘Post-Chicago Economics and Workable Legal Policy’ [1995] 63 Antitrust L. J. 683

which focused on promoting only economic efficiency, began to be overtaken by the new fact based analysis, which rejected much of the Chicago School's simplistic legal rules in favour of more complex analysis.⁸ This led Pierce to say that, "...the post-Chicago scholars have challenged the conclusions of the Chicago scholars with respect to virtually every issue in antitrust law".⁹ Not only that, post-Chicago scholars have been praised as some of the most talented scholars in the industrial organisation field.¹⁰ As a consequence, post-Chicago thinking is increasingly influencing the antitrust policy of the United States¹¹ and it will be argued in later chapters that it is also impacting EU competition policy, including the law on tying.

1.2. Challenging the principles of the Chicago School

The basis of Chicago School thinking was that market behaviour could be evaluated on the basis of price theory. Using price theory as a filter, the courts would be able to remove costly and time consuming factual analysis in many antitrust cases and in some areas declare blanket legality on certain previously illegal behaviour. However, the Chicago School's theories, although simple and easily applied, lacked a realistic grasp of how varied and complex markets really are, or can be, and this was brought unswervingly back into view by the work of post-Chicago scholars.¹² Information such as product differentiation, switching costs, information costs and product use proportions could act to make apparently competitive markets anti-competitive or at least exploitable. This means that post-Chicago scholars could find the potential for abusive behaviour, for example, behaviour that excludes new entrants, in certain markets that initially appear to be competitive. The post-Chicago economists therefore criticised the Chicago School for not taking these factors into account.¹³ Further examples of market characteristics that post-Chicago scholars identified as relevant when considering anti-competitive conduct include the presence of specialised assets, economies of

⁸ Gary Minda, 'Antitrust at Century's End' [1995] 48 S. M. U. L. Rev 1749, 1753

⁹ Richard J. Pierce, 'Is Post-Chicago Economics Ready for the Court Room?' [2001] 69 Geo.Was.L.R. 1103, 1106-1107

¹⁰ *ibid* 1107

¹¹ Herbert Hovenkamp, 'Antitrust Policy After Chicago' [1985] 84 Mich.L.Rev. 213, 225

¹² Herbert Hovenkamp, 'Post-Chicago Antitrust: A review and critique' [2001] 2

Colum.Bus.L.Rev. 257, 268

¹³ *ibid* 268

scale, strategic pricing (even above cost) and network externalities.¹⁴ All these matters needed to be taken into account when considering whether a particular behaviour was anti-competitive. In this manner post-Chicago scholars demonstrated that whether a market was competitive or not depended on many specific circumstances which were not taken into account in the simplistic theories of Chicago.

2.0 General principles of Post-Chicago analysis

The difficulty that presents itself when considering the tenets of the post-Chicago view is that in the strictest sense there are very few tenets at all. The number and variety of practices that are considered harmful according to post-Chicago analysis are largely unquantifiable.¹⁵ There are as many possibilities as there are types of market. Also, since post-Chicago is truly economics and evidence based, there is no common ideology running through its adherents and so there is often little common opinion.¹⁶ If there were to be a tenet of post-Chicago, it would be simply that it is not possible to say definitively whether or not a behaviour is anti-competitive until the individual characteristics of the market have been established. However, although generalised tenets are not easily established for all post-Chicago scholars, some general principles that have been expressed will be explained below.

2.1 The Post Chicago method of investigation

As stated previously one of the greatest differences between Chicago and post-Chicago scholars is to be found in their attitude to factual analysis. Many of the principles that the Chicago School expounded shortened judicial enquiry¹⁷ (in the US competition enforcement is conducted largely through the courts, unlike in the EU). For example, if there was an accusation of predatory pricing the Chicago School would merely ask, is there any realistic prospect of recoupment? If there were no barriers to entry (and few are recognised in

¹⁴ Ibid 270

¹⁵ Herbert Hovenkamp, 'Post-Chicago Antitrust: A review and critique' [2001] 2 Colum.Bus.L.Rev. 257, 268

¹⁶ Lawrence A. Sullivan, 'Post-Chicago Economics: Economists, Lawyers, Judges, and Enforcement Officials in a less Determinate Theoretical World' [1995] 63 Antitrust L. J. 669, 671

¹⁷ Ibid 677

Chicago School literature¹⁸) there was no chance of recoupment of lost profits. As a consequence, a Chicago School advocate would recommend a court dismiss the case without further investigation. After all, any further analysis would be futile if there was no chance of recoupment. This is because from a Chicago School point of view, no rational business person would sacrifice profit if there was no opportunity to recover it later. Post-Chicago takes a different approach. Post-Chicago scholars look to empirically analyse each individual market in an effort to understand observed distinctions between classical economic models and the specific market under examination at that time.¹⁹ This, it should be noted, is more like the Harvard School discussed in Chapter Two. In short, post-Chicago seeks to view facts in such a way that it can identify any reason why general rules, such as those produced by Chicago, do not apply in a particular market and thereby to identify potential anti-competitive conduct where the Chicago School would, after brief analysis, find none.

2.2 The use of game theory in predicting firms' behaviour

Another aspect of the post-Chicago approach is the use of economic theories that go far beyond simple price theory.²⁰ Whilst the Chicago School relied upon relatively simple market models, post-Chicago scholars instead use more complicated market structures and evaluate the market actors' behaviour using game theory.²¹ The basis of game theory is essentially that competitors do not make their decisions in a vacuum. That is to say that when making decisions regarding their firms' future performance and strategies, they take into account the likely behaviour and strategies of their competitors.²² These decisions are also usually made in the presence of

¹⁸ See previous chapter for the attitude of the Chicago School towards barriers to entry

¹⁹ Lawrence A. Sullivan, 'Post-Chicago Economics: Economists, Lawyers, Judges, and Enforcement Officials in a less Determinate Theoretical World' [1995] 63 *Antitrust L. J.* 669, 670

²⁰ David R. Bickel, 'The Antitrust Division's adoption of a Chicago school economic policy calls for some reorganisation: but is the division's new policy here to stay?', (1983) 20 *Hous. L. Rev.* 1083, 1123

²¹ Federico Etro, 'Competition Policy: Toward a new approach' (2006) 2(1) *Eur. Competition J.* 29, 33-34

²² See generally Steven J. Brams, 'Applying game theory to antitrust litigation' (1978) 18 *Jurimetrics J.* 320; Dennis A. Yao, Susan S. Desanti, 'Game theory and the legal analysis of tacit collusion' (1993) 38 *Antitrust Bull.* 113, 122-124; Martin Shubik, 'Game theory, law and the concept of competition' (1991) 60 *U. Cin. L. Rev.* 285.

information imperfections, that is to say that those making the decisions do not know exactly what the other competitors know and vice-versa. This results in new theories of how dominant firms can exclude competitors or hinder market entry coming to light that Chicago scholars had previously left unconsidered.

2.3 The measure of welfare

One of the most novel arguments made by members of the Chicago School was that the goal of competition law should, rather than being composed of vague generally attractive principles, such as fairness, political democracy and the preservation of small businesses,²³ be formulated on the precise and single aim of “consumer welfare”.²⁴ While the post-Chicago School has not challenged the idea that customer welfare should be the sole aim of competition law, they have argued that the basis of consumer welfare, as defined by members of the Chicago School is flawed. Robert Bork defined consumer welfare to mean the combination of allocative and productive efficiency. These two together made up the overall efficiency of a society and this determined its wealth which Bork equated to consumer welfare.²⁵ As a result of this, to Bork, if a firm participated in behaviour that harmed customers by “X” amount but saved the firm involved “Y” if $Y > X$ then this would be considered acceptable.²⁶ As long as the overall result is a net increase then this is considered to be beneficial to society.

Salop, a post-Chicago theorist, has argued that this should not be considered as a “consumer welfare” standard, but rather an ‘aggregate welfare standard.’²⁷ It is a standard that takes into account harm to consumers, the defendant firm and competitors equally.²⁸ Salop states that a “true consumer

²³ Robert Bork, *The Antitrust Paradox: A Policy at War with Itself* (Simon & Schuster, 1978) 426-429

²⁴ *ibid* 50-51

²⁵ *ibid* 91

²⁶ Steven C. Salop, ‘Question: What is the real and proper antitrust welfare standard?’ [2010] 22 *Loy. Consumer L. Rev.* 336, 352

²⁷ *Ibid* 336

²⁸ *ibid* 338

welfare standard” should be indifferent to the harm to competitors unless it will also be likely to harm consumers.²⁹

Salop argued against the aggregate welfare standard because, as previously mentioned, applying it would mean that harm to consumers would be acceptable assuming that there was a greater benefit to the firms involved overall. The example given by Salop is that of an efficient joint production facility between all the firms in one particular market.³⁰ He argues that under a true customer welfare standard the firms could cooperate in production (increasing efficiency) but continue to engage in price competition. If the prices paid by consumers did not increase, this would be acceptable: production is more efficient, but the consumer pays no more for the product, they may, indeed, pay less. If aggregate welfare was the standard however the firms could enter the joint venture and also market together, having the effect of raising prices for consumers. This would be acceptable under the aggregate welfare standard, as long as the price increase for consumers was not greater than the efficiency savings experienced by the firms undertaking the joint venture.³¹ Salop argues that this would be inefficient and consequently that the aggregate welfare standard should not be used. These are some of the more general principles that can be seen to be advocated by those following the post-Chicago approach.³²

[sections 2.4 and 2.5 can be removed in necessary]

There are in addition substantive points that have been made by members of the post-Chicago School. By way of example, arguments made in relation to the resilience of cartels and the efficacy of predatory pricing will be given below, as an illustration of how post-Chicago scholars have undermined Chicago thinking or otherwise altered how particular practices can be seen from an antitrust point of view. After this the main body of this chapter will

²⁹ *ibid* 338

³⁰ *ibid* 352

³¹ Steven C. Salop, ‘Question: What is the real and proper antitrust welfare standard?’ [2010] 22 *Loy. Consumer L. Rev.* 336, 352

³² In Chapter Seven it will be seen that this view of customer welfare is playing an increasingly important role within EU competition law.

assess the substantial theoretical impact made by post-Chicago scholars on tying.

2.4 Cartels

Unlike the Chicago School, post-Chicago scholars have submitted that cartels are in fact more robust than expected. The large body of cartels that have been uncovered by the US Department of Justice has suggested that the 'chiselling' tendencies of the market place are not as effective at undermining pricing fixing arrangements as Chicago scholars would have liked.³³ Examples given include the US steel industry³⁴ and car manufacturer price leadership.³⁵ These markets took 75 years and 55 years respectively to be undermined.

2.5 Predatory pricing

It was originally claimed by the Chicago School scholar Professor John McGee that economic analysis proved that predatory pricing could never be used as a profitable business strategy.³⁶ However, through thorough observation and investigation, Malcolm Burns has shown quite clearly that predatory pricing has been used effectively to undermine competitors. In his study, he showed that a US firm (American Tobacco) had used predatory pricing to first lower the value of shares³⁷ of its smaller competitors and then acquiring their competitors' firms at a substantially lower cost.³⁸ Surprisingly, in this instance, the exploitation was not even particularly complex, but rather predatory pricing was used to drive down the value of the target company

³³ F. M. Scherer, 'Some Principles for Post-Chicago Antitrust Analysis' [2001] 52 Case W.Res.L.Rev. 5, 8

³⁴ F.M. Scherer, *Industry Structure Strategy and Public Policy* (HarperCollins College Publishers 1996) 150-199

³⁵ *ibid* 299-319

³⁶ John S. McGee, 'Predatory Price Cutting: The Standard Oil (N.J.) Case' (1958) 1 J.L.&Econ. 137, 140-41

³⁷ Buy pricing tobacco in a predatory manner this would be likely to drive down competitors' profits. When those competitors then issued profits warnings or announced unexpectedly low profits their share price is likely to drop substantially since investors would believe the profitability of the firm is lower than previously believed and therefore sell the shares to invest their capital in more profitable ventures, causing the share price to fall.

³⁸ Malcolm R. Burns, 'Predatory Pricing and the Acquisition Cost of Competitors' (1986) 94 J.Pol.Econ. 266, 290-91

before it was bought up at a “bargain” price.³⁹ It was shown therefore that an established Chicago School tenet⁴⁰ was in fact incorrect.⁴¹

³⁹ Richard J. Pierce, ‘Is Post-Chicago Economics Ready for the Court Room? [2001] 69 Geo.Was.L.R. 1103, 1115

⁴⁰ *ibid* 1116

⁴¹ Even if Burns also believed that the courts would not be able to distinguish between predatory pricing and competitive pricing and should therefore ignore it (see Peirce, 1115)

3.0 Tying theories

The following section puts forward the post-Chicago theories on tying. Many of these theories are the latest and most contemporary theories explaining the effects of tying under specific market conditions. These theories are important because they demonstrate that contrary to what has been suggested by Chicago School theorists tying can be used anti-competitively. This is significant to this thesis as, in order to evaluate whether tying should be prohibited and how the law should treat the practice, it must be established if and when tying can be used to hinder competition.

3.1 Whinston's model 1990

In Whinston's model put forward in 1990, a tying practice is compared with a practice of independent pricing of two separate items. Various courses of behaviour (including variations on how easily reversed the tie is) are compared in order to ascertain which could cause, in theory, greater loss to a producer of a single product over a tie.

Whinston puts forward the following scenario to begin. There are two firms active in a market, one of them has a monopoly in product A and produces product B which is sold in a competitive market. The firm then commits itself to producing only a bundle of product A and B. In this situation the second firm (which only makes product B) would earn less than in an independent pricing game.⁴² The reasoning for this however is not as straightforward as the leveraging of market power explanation relied upon by the Harvard School. Whinston posits that the reason that exclusion could take place here, is that in order to maintain sales of its monopolised good A, the firm must make sales of product B and to do this the company will cut the price of the bundle in order to take away the sales of the second firm. This causes the profits of the bundling firm to be lower. However if this reduces the profitability of the firm producing only product B to such an extent that it causes the firm to leave the market this could still be a profitable practice. This scenario essentially uses tying to drive the competitor out of the market.

⁴² Michael D. Whinston, 'Tying Foreclosure, and Exclusion' (1990) 80 Am.Econ.Rev. 4 837, 843

The second scenario is where there are two products A and B that are usually used together but for which there are alternative uses for product B. First to understand this scenario a contrast must be understood. If product A and B were used in equal proportion then a monopolist in product A would not wish to tie A and B necessarily. This is because by allowing B to be sold competitively by other firms for as little as possible, the monopolist can increase sales of product A. This is because products A and B are used together in fixed proportions so an additional sale of B will result in an additional sale of A. However, if this is compared to a system where there are alternative uses for product B there is no guarantee that increased sales of B will lead to an increase in the sale of monopoly good A. A simple example can be put forward as illustrated by the case of *Hilti*.⁴³ In this case, A would have been the cartridges used with the nail guns that Hilti produced. Product B would be the nails. There were other producers of nails and there were other uses for nails when Hilti sought to bundle both nails and cartridges together. However in this scenario by tying the products together the monopolist is seeking to deprive the competitor of sufficient business so that they can no longer profitably remain in the market for product B.

3.2 Choi and Stefanadis model 2001

In the Choi and Stefanadis⁴⁴ model tying causes the cost of research and development to rise and as a consequence makes market entry more difficult. The model works on the basis that in many markets great amounts of capital are required to successfully develop a product due to the cost of research and development. In addition, there is often an inherent risk of failure for each product that is developed. Choi and Stephanadis point out that by tying two products together a company can increase the chance of an entrant failing to develop a successful combination of products to compete with a tie, working on the assumption that each product will only work when used in conjunction with the other. This is because each element of the product has to be a

⁴³ *Eurofix-Bauco v Hilti*, Commission Decision 88/138/EEC, 1988 O.J. (L 065) 19. This early EU tying case is discussed in detail in Chapter four.

⁴⁴ Jay Pil Choi, Christodoulos Stefanadis, 'Tying, investment, and the dynamic leverage theory' (2001) 32 RAND.J.Econ. 52

success for there to be a marketable final product so by doubling the number of products required, the firm increases the chance that a failure of one of the products will prevent entry into the market by a new competitor.⁴⁵

3.3 Nalebuff model 2005

In Nalebuff's model,⁴⁶ once again product A is the monopolised product produced by the tying firm. The market for B is competitive. This model has the additional premise that product A and B are used together in a ratio, for the purposes of illustration 1 to 1. Therefore if someone needs to buy A they also need to buy B, and *vice versa*. In this illustration, Nalebuff shows that even without a 'tie' as such, the firm can actually tie the products in practice. All that is required is essentially cross subsidisation, so that the monopolised product's price is increased by the same measure that the competitive product is discounted. That way there is no actual change in the profit made by the tying company, but it would be illogical for a consumer to buy A and then B from another company because it would be far cheaper to get them both from the tying firm.⁴⁷

A second scenario given by Nalebuff, which is similar to the first, is for the firm to offer A at a higher price than if it is bought with B. Once again such a scenario makes it more expensive to buy B elsewhere and thus makes it more logical for a customer/consumer to buy both from the tying firm. What is particularly noteworthy about Nalebuff's model is that it does not cause the tying firm to lose any profit, unlike the models posed by Whinston. Further, although in practice the effect of this pricing strategy is a tie, it does not appear as a naked contractual tie at all on first glance. Its objective is obscured and it appears more benign than it actually is.⁴⁸

3.4 Carlton and Waldman model 2002

⁴⁵ Jay Pil Choi, Christodoulos Stefanadis, 'Tying, investment, and the dynamic leverage theory' (2001) 32 RAND.J.Econ. 52, 59

⁴⁶ Barry Nalebuff, 'Exclusionary bundling' [2005] 50 Antitrust.Bull 321, 328

⁴⁷ This is relevant to later discussion in chapter 7 of equally efficient competitors and the Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02

⁴⁸ Barry Nalebuff, 'Exclusionary bundling' [2005] 50 Antitrust.Bull 321, 323

The Carlton and Waldman⁴⁹ model sets out two different scenarios. These are both based around two firms, two products and two separate periods of time.

The first states that where there are high entry costs in a market it may be profitable to tie goods together. In this example, it is assumed that the monopolist is already producing two products that are complementary once again at a ratio of one to one. The model states that normally if a new entrant produces the complementary product in the first period of time, it will be profitable and then in the second period it will be able to enter the primary product market (that in which the dominant firm holds a monopoly). As a result the monopoly position will be jeopardised. However, if the incumbent decides to tie, this will mean that to enter the market, the entrant must enter both the primary and the complementary markets at the same time. If the entry costs were low, this would not matter. If they were extremely high, then the entrant may not be able to enter the market regardless of tying. But if they were intermediate, the fact that the products are tied may make the cost of entry high enough together so that the entrant cannot profitably afford to enter the market, protecting the incumbent's monopoly position.⁵⁰ This of course depends on whether access to capital can be considered a barrier to entry.⁵¹

The second situation put forward is similar but rather than considering the cost of market entry it considers the effect when there are network externalities.⁵² In this case the entrant enters the complementary product market in the first period and may or may not enter the primary market in the second period. Using this example it is possible to see, that by tying the products in the first period the monopolist can create greater network benefits associated with its products. These benefits will then produce an incentive in period two for

⁴⁹ Dennis W. Carlton, Michael Waldman, 'The Strategic use of tying to preserve and create market power in evolving industries' (2002) 33 RAND.J.Econ 194

⁵⁰ Dennis W. Carlton, Michael Waldman, 'The Strategic use of tying to preserve and create market power in evolving industries' (2002) 33 RAND.J.Econ 194, 202

⁵¹ As discussed in Chapter 2.

⁵² Network externalities are exhibited by a market when the benefit to a consumer of a particular product increases depending on the number of other users of that same product. A simple illustration of this may be a telephone. The more people who own telephones the more people an individual with a telephone can call. This phenomenon is also referred to as network effects.

consumers to purchase the system of the monopolist even if the entrant then chooses to enter the primary and complementary markets.⁵³

⁵³ Dennis W. Carlton, Michael Waldman, 'The Strategic use of tying to preserve and create market power in evolving industries' (2002) 33 RAND.J.Econ 194, 207; this appears to be a scenario that may relate to the facts established in Microsoft I. This case is discussed in Chapter Five and Six.

3.5 Evans and Salinger model 2005

The Evans and Salinger model⁵⁴ in contrast to the others is in fact a model demonstrating when tying is the logical choice for any competitive producer who wishes to maximise the benefit of their product to their customers. This occurs in circumstances where the fixed cost for making a product is very high and the marginal cost is comparatively very low.⁵⁵ The result is that the cost of offering a greater selection of products is actually more expensive than offering all the products bundled together as one and allowing the customers to use what they wish. Where there is insufficient demand to warrant a product being made available individually, it is actually less expensive to bundle the products together thereby distributing the high fixed costs across all customers reducing the cost per unit. The determinant factors for this to apply are the marginal costs, the fixed costs and the number of customers that seek each variation. An ideal example could be two pieces of music, the production and deployment of which is very expensive, but once available, the marginal cost is virtually nothing. If a very high number of persons want both songs compared to those who may want just one, it is actually more expensive to make them available separately (incurring unnecessary distribution costs). In this case, there is no logical reason for making them available separately as it would be cheaper for consumers to just purchase the bundle and ignore the additional components that they do not want. This is highly important when considering markets such as software that, have very high fixed costs and very low marginal costs.

⁵⁴ David S. Evans, Michael Salinger, 'Why do firms bundle and tie? Evidence from competitive markets and implications for tying law' [2005] *Yal.J. on Reg.* 41

⁵⁵ David S. Evans, Michael Salinger, 'Why do firms bundle and tie? Evidence from competitive markets and implications for tying law' [2005] *Yal.J. on Reg.* 41, 57-61

4.0 Criticism of Post-Chicago

Post-Chicago has not been totally free from criticism. Here three areas of criticism that have been raised against post-Chicago thinking will be expressed including the most prevalent, namely the difficulty in transposing post-Chicago principles into legal rules which can be administered by the competition authorities and courts.

4.1 Concerns about government intervention

First of all there has been criticism from Chicago scholars that the real danger to the market is not so much corporations seeking to undermine the competitive market but rather the well-intended but ill-conceived behaviour and interference of government. Scherer provides some support for this argument. He notes that during his experience as a consultant⁵⁶ in connection with two alleged cartels, in both cases the behaviour that was supposedly prohibited was strongly influenced by government intervention. In the first instance, potash producers importing their goods into the US market were going to have their goods levied with 'anti-dumping' tariffs due to the objections of inefficient US producers. As a consequence a settlement was negotiated whereby the importing companies agreed to raise their prices to non-dumping levels.⁵⁷ In the second example, a competitor was pressured into joining a cartel by threats that if it did not participate it would be driven out of the market by anti-dumping complaints.⁵⁸ This does support the Chicago School view that government intervention can be damaging to markets, possibly even more damaging than certain anti-competitive behaviour. But in these instances, it is surely not antitrust intervention that is in question but rather anti-dumping policy. Therefore it can be argued that these examples should not be used to undermine court intervention for the purposes of the protection of competition, rather these examples support the reform of a specific policy, in this case, anti-dumping laws. As such the facts given do not

⁵⁶ Scherer does not specify in what capacity he acted as consultant in these cases.

⁵⁷ F. M. Scherer, *International Trade and Competition Policy*, in Einar Hope, Per Maeleng (eds), *Competition and Trade Policies: Coherence or conflict?* (Routledge 1998) 20-23

⁵⁸ F. M. Scherer, 'Some Principles for Post-Chicago Antitrust Analysis' [2001] 52 Case W.Res.L.Rev. 5, 9

represent a valid argument against antitrust or the use of post-Chicago analysis in court.

4.2 Prevalence of harm and consistency of approach

One criticism of post-Chicago analysis relates to the lack of predictability in its work. Pierce raises the point that post-Chicago scholars rarely try to show how frequently a particular behaviour is intended to have pro or anti-competitive effects.⁵⁹ For example, does tying behaviour have anti-competitive effects 1/10, 1/100 or 1/1000 times? Further he argues that post-Chicago theory often requires those applying it to determine what firms know about each other's actions and what firms will infer from each other's actions.⁶⁰ He says, "...there are always critical variables that I simply have no way of knowing, e.g. whether a firm can anticipate the reactions of its competitors with a high degree of accuracy at the time it takes a particular action".⁶¹ He goes on to say that the proponents of post-Chicago analysis rarely appear to agree on which course of action should be taken. This is when they are working from the same models and applying them to the same markets.

There are counter arguments to both those points. It is not necessary from a legal perspective to establish what proportion of instances of a particular behaviour is pro or anti-competitive. Courts do not deal with every single instance of, for example, tying, rather they investigate only those instances that are brought before it. As a consequence, the question a court is concerned with is "is there unlawful anti-competitive conduct in this case?" rather than trying to decide before a case begins "what is the statistical likelihood that anti-competitive conduct exists in this case?"

The second argument he raises is not so much an issue that relates to the appropriate use of economic theory, rather it relates to the courts maintaining an appropriate standard of proof. If a court is required to determine what firms

⁵⁹ Richard J. Pierce, 'Is Post-Chicago Economics Ready for the Court Room? [2001] 69 Geo.Was.L.R. 1103, 1107

⁶⁰ *ibid* 1108

⁶¹ *ibid* 1108

infer from each other actions they can rely on a number of types of evidence. First there is the recorded communication between senior company directors, which will often encompass strategy and consideration of other market actors' behaviour. Second there is direct observation where empirical evaluation shows that, for example, each time a dominant firm raises its prices the same competitors follow suit. Third and finally there is of course economic theory. It is strange that a school of thought that is so reliant on establishing the reasoning behind economic behaviour using economic principles like price theory and the concept of the rational business person would be so averse to the use of economic principles to establish the likely behaviour of competitors in response to the behaviour of other firms. Where there is no clear outcome on the basis of any of these methods and the court is convinced after appropriate investigation that there are critical variables that it cannot accurately determine, it is free to decide there is insufficient evidence of anti-competitive conduct. This may mean that certain behaviour that is anti-competitive may not be caught, but surely this is better than the alternative; choosing blanket legality that will fail to address anti-competitive conduct even when these "critical variables" can be established?

4.3 The ability of the courts to administer post-Chicago principles

One of the most consistent attacks levelled at post-Chicago analysis is that in practice, whether or not the economic theory behind it is accurate, it cannot be effectively applied by the courts and/or competition authorities. In fact Shapiro,⁶² Pierce⁶³ and Hovenkamp⁶⁴ all separately claim that post-Chicago should not be applicable, or is not yet capable of being applied within the court room.⁶⁵

These complaints can be broken down into two basic arguments:

⁶² Carl Shapiro, 'Aftermarkets and consumer welfare: Making sense of Kodak' [1995] 63 Antitrust L.J. 483, 484

⁶³ Richard J. Pierce, 'Is Post-Chicago Economics Ready for the Court Room?' [2001] 69 Geo.Was.L.R. 1103, 1009

⁶⁴ Herbert Hovenkamp, 'Post-Chicago Antitrust: A review and critique' [2001] 2 Colum.Bus.L.Rev. 257, 271

⁶⁵ It is not clear whether these authors would consider post-Chicago analysis equally as difficult for an authority like the European Commission to apply or whether their criticism relates solely to courts.

1. Judges and the court system cannot effectively apply post-Chicago economics due to their complexity;⁶⁶
2. The judicial system is too slow, it cannot analyse anti-competitive behaviour in a time frame that would make it useful to the market.⁶⁷

Hovenkamp instead praises the Chicago School for producing a doctrine that has a “purity of vision that few legal disciplines ever attain”.⁶⁸ This attachment to Chicago School principles just because it is pure and undemanding to apply, it is submitted, is misplaced. After all there are many areas of law that could be simplified by removing the complicated parts or ignoring evidential elements that are difficult to ascertain. Contract law for example could become far more pure by simply pursuing the goal of certainty rather than fairness or the intention of the parties, but whether or not that would lead to superior application of the law is highly debatable.

In answer to the first argument it is argued that there are many complex issues that courts are required to consider. There are ways to help courts deal with these matters, not least the use of expert witnesses⁶⁹ and judicial seminars. Judicial seminars are particularly pertinent as the Chicago School itself chose to use judicial seminars to bring their theories to the attention of the judiciary.⁷⁰

⁶⁶ Richard J. Pierce, ‘Is Post-Chicago Economics Ready for the Court Room?’ [2001] 69 *Geo.Was.L.R.* 1103, 1109-1110; Herbert Hovenkamp, ‘Post-Chicago Antitrust: A review and critique’ [2001] 2 *Colum.Bus.L.Rev.* 257, 269

⁶⁷ Richard J. Pierce, ‘Is Post-Chicago Economics Ready for the Court Room?’ [2001] 69 *Geo.Was.L.R.* 1103, 1110-1111, see also Hovenkamp’s suggestion that if behaviour is too complex to be evaluated in a “reasonable time” the courts should not intervene; Herbert Hovenkamp, ‘Post-Chicago Antitrust: A review and critique’ [2001] 2 *Colum.Bus.L.Rev.* 257, 273

⁶⁸ Herbert Hovenkamp, ‘Post-Chicago Antitrust: A review and critique’ [2001] 2 *Colum.Bus.L.Rev.* 257, 269

⁶⁹ Richard J. Pierce, ‘Is Post-Chicago Economics Ready for the Court Room?’ [2001] 69 *Geo.Was.L.R.* 1103, 1109, Pierce does argue that the use of expert witnesses is not necessarily effective due to the propensity of the experts to give explanations that favour their own party’s case, or for parties to search for experts who will give explanations favourable to their case. But it is difficult to see how this is different to the use of experts in any other area of law.

⁷⁰ David R. Bickel, ‘The Antitrust Division’s adoption of a Chicago school economic policy calls for some reorganisation: but is the division’s new policy here to stay?’ (1983) 20 *Hous. L. Rev.* 1083, 1101

The second argument raised is that judicial governance takes too long to moderate dynamic markets, an example given being the IBM case.⁷¹ In IBM, the US Department of Justice started a case when IBM was the dominant firm in the computer market. The case was abandoned 13 years later by which time IBM was no longer dominant in that market and even the company's viability in the market was starting to come into doubt. The suggestion is then that by the time a case has been decided by a court, the market has corrected the deficiency anyway or there has been such a change that the market in question is completely different. In response to this it should be noted that for each case that takes over a decade there are examples of cases that are swiftly and effectively determined and their remedies imposed within a comparatively slight time scale. *Microsoft I*⁷² for example was completed relatively swiftly, with the Commission decision⁷³ published in 2004 and the decision of the General Court⁷⁴ (then CFI) in 2007, once it was completed further issues regarding the deployment and installation of web-browsers were resolved in less than a year, although admittedly this was through the use of commitments rather than court judgement. Also while cases such as IBM take place in dynamic technology markets, there are other cases which take place in relatively static markets. There is no logical reason to prohibit the use of post-Chicago models in all antitrust cases on the basis that some markets move too quickly to allow them to be applied effectively.

There are also those who believe that post-Chicago economics can be converted into a workable legal policy.⁷⁵ Brodley believes that with simplification some of the more complex modern economic principles can be made into a workable form of law.⁷⁶ Further, there are two groups of commentators who have each put forward their own version of a test that could, and they believe should, be used to apply the latest thinking in

⁷¹ United States v. International Business Machines Corporation, Docket number 69 Civ. DNE (S.D. NY); see Richard J. Pierce, 'Is Post-Chicago Economics Ready for the Court Room?' [2001] 69 Geo.Was.L.R. 1103, 1110

⁷² T-201/04, Microsoft v Commission [2007] ECR II-3601

⁷³ Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965

⁷⁴ T-201/04, Microsoft v Commission [2007] ECR II-3601

⁷⁵ Joseph F. Brodley, 'Post-Chicago Economics and Workable Legal Policy' [1995] 63 Antitrust L. J. 683, 694

⁷⁶ *ibid* 695

economic theory to tying cases coming before the courts. These tests will be explained in the following section.

5.0 How should tying be treated by the courts?

There have been three legal approaches to tying advocated in light of the arguments made by post-Chicago analysts. Ahlborn *et al*⁷⁷ summarise the post-Chicago tying models then come to the conclusion that tying should be given *per se* legality.⁷⁸ This is because post-Chicago analysis, in their eyes, while providing examples of situations where these activities may be anti-competitive, "...do not disturb the consensus view that tying and bundling are a constant feature of economic life"⁷⁹ and that in reality most of the time firms are really seeking to obtain valuable efficiencies. Working on the assumption that the cost to society due to tying is low,⁸⁰ that it is difficult to measure efficiencies, that tying itself is widespread and that economic theory and empirics are not able to distinguish pro-competitive from anti-competitive tying,⁸¹ Ahlborn *et al* state that the best approach is modified *per se* legality: Tying arrangements should be considered legal unless there is strong evidence that there are significant anti-competitive effects that outweigh the beneficial effects. This means tying arrangements would be given a rebuttable presumption of legality.

Schmidt argues for a new regulatory model that is based upon the following five points:

- *Per se* legality
- An expanded consumer demand test to define products
- A market share cap to assess dominance
- As-efficient-competitor test and consumer harm test to assess anti-competitive effects
- Objective justification considerations based on Article 102(d)⁸²

Per se legality

⁷⁷ Christian Ahlborn, David S. Evans, A. Jorge Padilla, 'The antitrust economics of tying: a farewell to *per se* illegality' (2004) 49 *Antitrust Bull.* 287, 290

⁷⁸ *ibid* 290

⁷⁹ Ahlborn *et al* (n 77) 330

⁸⁰ *ibid* 334

⁸¹ *ibid* 338

⁸² Hedvig Schmidt, *Competition Law, Innovation and antitrust* (Cheltenham, Edward Elgar 2009)

First Schmidt sets out that tying should be *per se* legal. What is meant by this is that undertakings are free to tie until they reach a particular market power threshold. After this point the tie will be subject to the following test to ascertain whether it is an illegal tie.⁸³ This, so far, follows the present EU tying law, as tying is only prohibited where an undertaking is found to be dominant.

An expanded consumer demand test to define products

The first step of the test would be to ascertain whether or not there were two separate products. This would be done using an 'expanded consumer demand test'.⁸⁴ This would ask whether there was consumer demand for the tying product free of the tied product.⁸⁵ If there is no demand for the tied product without the tying product there is no tie. But Schmidt also combines this with further considerations: It must also be shown that the tie produces new functionalities that cannot be obtained by simply 'bolting' the products together.⁸⁶ The question is also asked whether there is evidence of the market developing in such a way that there will not be demand for a particular element of a product in future. Courts would also be able to distinguish between components and added features. If a product will not work without a particular element then the sale of these together should not be seen as tying separate products even if there is demand for it on its own.⁸⁷ This, she argues, is to allow courts to distinguish between contractual tying and technological integration.⁸⁸

A market share cap to assess dominance

A market share cap would be used to assess dominance. This would be arranged into three categories:

- Ties by undertakings with less than 40% market share would be presumed harmless

⁸³ Schmidt, *Competition Law, Innovation and antitrust* (Cheltenham, Edward Elgar 2009) 186

⁸⁴ *ibid* 215

⁸⁵ *ibid* 211

⁸⁶ *ibid* 213

⁸⁷ *ibid*

⁸⁸ *ibid* 214

- Ties by undertakings with between 40-60% in competitive markets would be permitted to tie
- Ties by undertakings with more than 60% of the market or more than 40% in an uncompetitive market would be subject to a full assessment weighing pro and anti-competitive effects.⁸⁹

As-efficient-competitor test and consumer harm test to assess anti-competitive effects

To assess anti-competitive effects two factors will be taken into account. First an as-efficient-as competitor test will be used to assess whether competitors may be equally efficient but are nevertheless unable to compete due to the advantage created by the tying arrangement. If such exclusion is found a full assessment of pro and anti-competitive effects should be made using consumer harm as the appropriate measure of damage.⁹⁰ Part of this assessment is included in the next stage (objective justification) because essentially that stage is just an assessment of the pro-competitive effects of the tie.⁹¹ If there is a net detriment to the consumer, taking into account all available information, the conduct will be prohibited.⁹²

Objective justification considerations based on Article 102(d)

Under this test a tie would be justified under two circumstances. The first is where there are potential efficiencies that outweigh any anti-competitive harm (as established under the arm of the test immediately above). The second is where the nature of the products or market conditions dictates that tying is part of commercial usage.⁹³

In some respects Schmidt's model is similar to the current Article 102(d) approach but with greater weight given to economic efficiencies when balancing them against foreclosure effects.⁹⁴ However, this appears to be based on the mistaken belief that the EU courts are not taking efficiencies into

⁸⁹ *ibid* 222

⁹⁰ *ibid* 239

⁹¹ *ibid* 240

⁹² *ibid* 233

⁹³ *ibid* 249

⁹⁴ *ibid* 51-52.

account effectively at present.⁹⁵ What should also be taken into account is that although her approach recommends *per se* legality, ties deemed to cause harm are required to have a “strong defence” to be permitted.⁹⁶ Consequently, although it may appear that Schmidt’s proposal conforms more to Ahlborn *et al*’s recommendation, it is actually more in line with the suggestions of Kühn *et al* below.

Kühn *et al*⁹⁷ use almost exactly the same theories as considered by Ahlborn *et al* to come to a rather different conclusion. They highlight that the conclusion reached by Ahlborn *et al* assumes that the cost of tying to society is low. Further the premise upon which so much of the article is based, that tying is ubiquitous, is vacuous when placed in context. The fact that shoes do not come without laces and that cars cannot be bought broken down into their constituent parts ignores the essential element in all tying tests, that the vendor has market power.⁹⁸ This means that the innocuous examples of tying provided, such as shoes and laces, would, rightly, never be pursued as anti-competitive behaviour because there are no dominant firms in shoes or laces. This requirement of market power is clearly appreciated by post-Chicago authors too, since, as can be seen by the models above, they usually involve two products, one of which is monopolised. Therefore this claim that tying is common, although technically accurate, is misleading.

Kühn *et al* also note that the claims to efficiencies are often overstated with sweeping generalisations.⁹⁹ There are efficiencies claimed that don’t actually require tying, a plethora of situations ignored where there aren’t efficiencies and theories misinterpreted so that efficiencies appear that don’t really exist. In addition while examples are provided where it is more effective for a

⁹⁵ See *ibid* 96-97 and 212-213 for an example of Schmidt stating that a tie that produced an improvement in performance was rejected by the General Court (as an efficiency justification) due to it not reaching a high enough threshold when in fact the Court rejected it due to a lack of evidence to support the claim of improved performance; Case T-201/04 Microsoft v Commission [2007] ECR II – 3601, para 1160

⁹⁶ *ibid* 240

⁹⁷ Kai-Uwe Kühn, Robert Stillman, Cristina Caffarra, ‘Economic theories of bundling and their policy implications in abuse cases: an assessment in light of the Microsoft case’ (2005) 1 *Eur.Competition.J* 85

⁹⁸ *ibid* 109

⁹⁹ *ibid* 107

manufacturer to assemble products than consumers, examples where the reverse applied are notable only by their absence. In short, Kühn *et al* argue that where efficiencies are claimed to exist these claims need to be demonstrated on the basis of those particular circumstances, they should not just be able to rely on a general defence of efficiencies.¹⁰⁰ They then turn their attention to the claim that economic theory and empirics are not capable of discerning between anti-competitive and pro-competitive tying.¹⁰¹ They state that while the models involved in post-Chicago thought depend on specific conditions being present in a market, these are often easily identifiable characteristics that have quite predictable effects. So that while, unlike Chicago School theories, it is not possible to make a single test that broadly applies to all situations, each model does have certain empirically notable features that allow the models to be confirmed as applicable or rejected as inapplicable in each situation. As such they put forward a test that they believe maximises the chance of the competition enforcement authorities preventing abusive tying while minimising the resources required to do so. The test has three stages:

1. There would be safe haven rules that would put a tie onto a “white” or “permissible” list. This would happen if a tie did not conform to the following: market power in one of the bundled products, complementarity and asymmetry in product lines.¹⁰²
2. If these characteristics are present then the circumstances should be investigated into order to ascertain whether the tie appears to fit with one of the models previously mentioned (or any new models).¹⁰³
3. The firm should have the opportunity to put forward any efficiency defences it may consider relevant. The burden of proving efficiencies exist lies with the firm under investigation because unlike the government, courts and authorities they have access to private

¹⁰⁰ *ibid* 107-108

¹⁰¹ Kühn *et al* (n 97) 110, here they summarise the criticism of the Chicago School saying “discussions of policy towards bundling often either ignore robust effects, focusing excessively on the intricacies of specific models, or use sweeping generalisations drawn from specific models that ignore restrictive assumptions”

¹⁰² *ibid* 113

¹⁰³ *ibid* 115

corporate documentation that would give them the best opportunity to prove such efficiencies exist. It would then be for the authorities to decide whether or not they are the genuine reasons for the tie or whether they are nothing less than a pretext.

This shows that there are not only those who support the idea of post-Chicago economics being used in the court room, but commentators have gone further and proposed a legal test that can be used to determine whether or not an anti-competitive tie exists. It must be acknowledged that the test provided by Kühn *et al* is more a framework than a precise test. The second step does not give an exhaustive list of empirical criteria to look for; neither does it explain how a tie would be deemed to fit any particular model, but nothing less is to be expected. If a test is to truly conform to post-Chicago economics it cannot be rigid or strictly defined, neither could it provide an exhaustive list of models or circumstances that are of concern. By the very nature of post-Chicago antitrust analysis, any legal test must be open to investigate the particular circumstances of the market concerned and then consider whether the strategy the defendant is accused of employing would have any genuine anti-competitive effects. Under this approach a single test that explains each and every step of the test precisely cannot exist. The state of economic thought is constantly progressing providing new insights into determining where conduct damages the competitive process and markets are constantly changing providing new opportunities to seek to exploit imperfections in the market. Therefore the law is at a familiar junction of either choosing flexibility or predictability/legal certainty. As a result the test advocated by Kühn *et al*, although not as simple and quick to apply as previous Chicago School approaches, nonetheless provides the fairest result ensuring that anti-competitive conduct is not ignored by the broad brush approach of the Chicago School.

6.0 Application in EU competition law

In the following chapters it will be demonstrated that both the style of analysis and the actual theories of harm produced by post-Chicago analysis have

influenced EU competition law. Chapter five will show that in *Microsoft I*¹⁰⁴ the Commission started to adopt a style of analysis that is similar to post-Chicago methods. In Chapter Seven it will be demonstrated that these theories of competitive harm that are associated with post-Chicago analysis have already been incorporated into the EU approach to tying. This will be shown by reference to the Commission's 2009 Guidance on the enforcement priorities in applying Article 102 to exclusionary conduct.¹⁰⁵ It will be shown that, although the Guidance does not make direct reference to the authors of these theories or expressly use the term "post-Chicago", the Commission is sensitive to the developments taking place within the sphere of economics and is incorporating post-Chicago theories into their method of analysis. It will also be seen that the Guidance appears to support the consumer welfare standard¹⁰⁶ that is propounded by post-Chicago scholars.

7.0 Conclusion

It has been seen that the Chicago School, although increasingly dominant and influential in the US at one time, has been challenged since the 1980-90s by a new approach in antitrust economics which has been named post-Chicago antitrust analysis. Instead of using price theory, this style of analysis investigates each market's idiosyncrasies before drawing conclusions. It analyses the market using not just price theory but other newer approaches such as game theory. This has led to new arguments being made that explain, for example, that predatory pricing can be used to monopolise a market. What is particularly relevant to this thesis however is the progress made in relation to tying. There are a number of models that have been demonstrated to be viable courses of conduct that can create anti-competitive effects. Post-Chicago models have come under some criticism due to the difficulty in establishing the prevalence of the harm they exemplify and the challenges in application for competition enforcement authorities and courts. However, It

¹⁰⁴ Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965

¹⁰⁵ Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02

¹⁰⁶ See above: The measure of welfare

has been argued in this chapter that there is no reason why a broad framework of implementation that provides a logical approach to determining tying, while simultaneously providing sufficient flexibility to accommodate the recent and future developments in both economic thinking and market structures cannot be implemented by the competition enforcement authorities and courts.

In relation to the thesis as a whole this chapter has set out the main arguments made by post-Chicago analysts that relate to tying. This provides a base of comparison for future chapters so that it will be possible to see the ways in which the EU Commission and courts have followed and incorporated post-Chicago principles and theories on tying. This is particularly relevant regarding the Commission's Guidance on its enforcement priorities in applying Article 102 TFEU where, in Chapter 7, it will be shown that the Commission has deliberately incorporated the economic theories that have been expounded here, demonstrating an economics-oriented approach that is receptive to the latest post-Chicago analysis.

Chapter Four
The EU Approach to Tying: The mono-
theoretical period

1.0 Introduction

Having discussed the main schools of competition law analysis, the chapter turns now to the analysis of EU competition tying law. The period that this chapter covers is from the signing of the EEC Treaty in 1957 to 2004. This period has been selected because it represents what the author defines as the “mono-theoretical” period. That is the period where the Commission and courts of the EU appear to draw on only one economic/competition theory when deciding tying decisions: Ordoliberalism.

The purpose of this chapter is to make three main arguments. The first is that customer freedom, a concept highly regarded by Ordoliberal¹ scholars, has been a fundamental concept used within EU tying law to analyse tying problems. Second, it is argued that customer freedom is one of several concepts within EU tying law, and EU competition law more broadly, that reflect a strong Ordoliberal influence. It will also be shown that there is evidence that the EU competition enforcement authorities tacitly reject arguments and concepts made by Chicago School scholars. Third and finally it will be argued that the EU approach to tying pursues justifiable economic aims. These are the maintenance of customer welfare and the long term maximisation of competition in markets and neighbouring markets that are subject to limited competition.

This will be set out in the following way: First, the way tying law was viewed and understood during this period will be set out. Using sources that were published during the mono-theoretical period it will be shown that during this period there was relatively little knowledge regarding the law and theory underlying tying in terms of when a tie existed and what the harm was that tying law was seeking to prevent. It will also be shown that those who did try to ascertain what harm tying law intended to address posited that the concern

¹ Eucken in: Peacock, A.T. and Willgerodt, H. (Eds), *Germany's Social Market Economy*, (London, Macmillan 1989) p35; Walter Eucken, (1948/1982). The social question and Böhm, Forschungs-und Lehrgemeinschaft', 162 and Nils Goldschmidt, Michael Wohlgemuth, 'Social Market Economy: origins, meanings and interpretations' CPE (2008) 19 269.

underlying tying law was based on “leverage theory”. It will be argued that this is not the case but rather this confusion was caused by a relative lack of EU case law at the time and an abundance of US case law that did explicitly express a concern regarding leverage theory. Establishing this is important as, by breaking down previous misconceptions regarding the aims and theories underlying EU tying law it is possible to begin to assess the genuine aims of EU tying law and understand how a tie was established.

Second, the main element of this chapter will be set out. It will be argued that tying law was based on the concept of customer freedom. That is to say the true concern of the EU competition enforcement authorities was not leverage theory, but rather protecting the freedom of the customer to choose the combination of products that they considered most appropriate. After this is set out it will be supported by evidence from court judgements, Commission decisions and the opinions of advocate generals. This is significant contribution as it establishes what behaviour the EU competition enforcement authorities were really concerned with preventing and this greater understanding of the law provides the opportunity to compare the approach during this period with the approach used in later periods to determine whether customer freedom still is a major influence in determining tying.

Next, the jurisprudence will be used again to demonstrate what the harms of tying were considered to be at this time and it will explain how the protection of customer freedom was considered to thwart these issues. The Treaty² provisions on tying give little guidance as to how tying will be precisely determined or what economic harm it is seeking to prevent. It states that abuse by one or more undertakings of a dominant position is prohibited and that such abuse may, in particular, consist in:

“(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their

² Both the EEC Treaty and the Treaty TFEU

nature or according to commercial usage, have no connection with the subject of such contracts.”³

However, by reference to the decisions of the Commission and courts it will be shown that interfering with customers’ freedom to choose the combination of products that suits them is considered unlawful because the customer is in the best position to assess what combination of products is best for them, not the dominant undertaking. The second harm related to tying, according to the jurisprudence of this period, is that such ties limit access to the market for other suppliers. As such this restricts competition in markets, or neighbouring markets, where there is already limited competition due to the presence of the dominant undertaking.

After this several other concepts present in EU tying law will be highlighted to show how Ordoliberal ideas have influenced the application of competition law in the EU. In addition it will be shown that the EU tying law jurisprudence shows that arguments, that Chicago School scholars have supported, have been rejected by the Commission and courts, demonstrating that this is not a school of thought that has had a significant influence of the EU competition enforcement authorities. This section is important as it establishes, in conjunction with the sections above on customer freedom, that Ordoliberal theory has been a very substantial source of inspiration for the law on tying in the EU. In contrast, the Chicago School has not.

Finally, this approach to tying will be assessed from an economic point of view. In order to critique the EU approach, arguments raised by members of the

³ Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.

Such abuse may, in particular, consist in:

...

(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.

Chicago School,⁴ that suggest that tying ought not be prohibited will be used as a lens through which to critique the EU approach. Through this it will be argued that the law on tying during this period is consistent and pursues two valid economic aims. The first is to maximise the welfare of the customer, by allowing them to pick the best products that they desire, rather than the dominant undertaking creating a situation where the customer has to choose the best tie of products. This it will be argued maximises the utility of those products to the customer. The second reason why this approach pursues sound economic aims is because it seeks to protect efficient producers/suppliers of products so as to strengthen competition on markets that suffer limited competition due to the presence of a dominant undertaking, either on that market or on a related market.

2.0 EU Tying Law 1957-2004

During the period of 1957-2004 there was little discussion of the European competition law approach to tying in the EU competition law literature. Specifically, there was very little debate concerning how European competition law was likely to ascertain:

1. How a tie was determined to have taken place; or,
2. what the potential economic harm from tying was supposed to be.

There were case comments published regarding *IBM*⁵ and *Hilti*,⁶ there was discussion of how dominance was determined in the *Tetra Pak*⁷ case in relation to which of the two markets involved were relevant (tying and tied)⁸ and even, immediately prior to the *Microsoft I* decision, a debate about why

⁴ In particular these criticisms will be based on the work of Richard Posner.

⁵ Case comment on *EEC v IBM* [1984] 3 CMLR 147 (CEC) (1986) 11(1) E. L Rev. 91

⁶ (no author given) Article 86 – tying obligations (1988) 9(1) E.C.L.R 19

Peter Alexiadis, European Court of Justice: competition laws – tying agreements 1992 14(5) EIPR D102

⁷ The decisions of *Hilti* and *Tetra Pak II* will be discussed below.

⁸ Scott M. Kareff, 'Tetra Pak international SA v Commission (Tetra Pak II): The European Approach to monopoly leveraging' (1997) 28 Law & Pol'y Int'l Bus 549

the software industry may be an exception to the rules prohibiting tying.⁹ But there was little on the strict legal definition of when a tie existed or the harm the prohibition was intended to prevent.

An illustration of this can be seen by looking at the work of Goyder. In 1988, the first edition of his textbook¹⁰ contained hardly any reference to tying at all.¹¹ However, under a subheading on abuses of intellectual property rights, it discusses tying in relation to the settlement between IBM and the Commission.¹² In terms of ascertaining when a tie has occurred, Goyder writes that the Commission will place importance on activities of dominant undertakings which foreclose competitors from a market by insisting that two related products can only be purchased together.¹³ What is not explained is how this causes foreclosure, neither is a reference given to what foreclosure means in this context. This remained the same in the second edition of the same textbook released in 1993.¹⁴ What can be seen to be missing generally from the literature on tying then is an analysis of how tying is established and what the underlying theory of economic harm associated with tying is that the rules are trying to prevent. There is one exception to this; the work of Waelbroeck, which will be considered next.

⁹ David S. Evans, A Jorge Padilla and Michele Polo, 'Tying in Platform Software: Reasons for a Rule of reason Standard in European Competition Law' (2002) 25(4) *World Competition L.& Econ.Rev.* 509

¹⁰ D. G. Goyder, *EEC Competition Law* (1st edn, OUP, 1988)

¹¹ In part this could be in part be attributed to the relatively small number of tying cases available at the time, however even those cases that did exist appear to have received little discussion at the time.

¹² Goyder (n 10) page 314-316; The facts were that IBM were charged with including main memory in the price of a central processing unit and refusing to supply it separately and also (less relevant to tying) refusing to disclose important interface information about IBM computer systems until they had actually been marketed. The Commission suspended its proceedings in return for an undertaking by IBM to amend its practice relating to memory bundling and interface disclosure.

¹³ Goyder (n 10) page 316; Goyder also discusses interoperability issues related to the case, calling these issues 'implicit tying' however this seems to have little to do with tying as it is now understood and bears more to what is now seen as interoperability issues. As such it is outside the ambit of this thesis.

¹⁴ D. G. Goyder, *EC Competition Law* (2nd edn, OUP, 1993)

One commentator's work that did seek to analyse the economic harm EU tying law was seeking to prevent is that of Denis Waelbroeck.¹⁵ Waelbroeck recognised that the then European Community had until the recent years preceding his writing in 1987 "hardly paid any attention" to tying¹⁶. Waelbroeck began his analysis with an appraisal of what he refers to as the traditional doctrine. By this it appears that he means 'leveraging theory', as discussed in Chapter Two. However, at this point it is possible to see that he contorts and confuses his appraisal of the European Approach.

Waelbroeck begins by describing the US case of *Standard Oil*¹⁷ that suggests that the competition concern of enforcement authorities when dealing with tying is related to customer freedom. He then goes on to equate this concern with another separate concern, namely leveraging theory.¹⁸ It is argued by this author that these are two different issues that should not be conflated.

He begins:

"In the United States, the basic reason for considering that tying arrangements violate competition rules was expressed in *Standard Oil Co*¹⁹ ... by conditioning his sale of one item on the purchase of another, a seller insulates the tied product from free competition and tries to convince the buyer to select it over others even if it is intrinsically inferior to competing products. Assuming that the buyer would anyway purchase the tied product if it had sufficient merit.

...

This so-called 'leverage theory' was espoused by the Commission of the European Communities..."²⁰

¹⁵ Denis Waelbroeck, 'The Compatibility of Tying Agreements with Antitrust Rules: A comparative study of American and European Rules (1987) 7 Yearbook European Law 39

¹⁶ *ibid*

¹⁷ *Standard Oil Co of California v United States* (1949) 337 US 293, 305, 69 S Ct 1051, 1058, 93 L Ed 1371

¹⁸ For leverage theory in US case law, see: *See Carbice Corp. of America v American Patent Development Corp* (1931) 283 U.S. 27, 30-32; *Mercoid Corp. v Mid-Continent Investment Co.* (1944) 320 U.S. 661, 667; Keith K. Wollenberg, 'An Economic Analysis of Tie-In Sales: Re-examining the Leverage Theory' (1986-1987) 39 *Stan. L. Rev.* 737, 740.

¹⁹ *Standard Oil Co of California v United States* (1949) 337 US 293, 305, 69 S Ct 1051, 1058, 93 L Ed 1371

²⁰ Waelbroeck (n 15) 53

The difficulty here is that a concern for the restriction of consumer choice (that which was expressed in *Standard Oil*) and leverage theory are two completely separate concerns.

While concern for consumer freedom was appropriately articulated by WaelBroeck by reference to the *Standard Oil* case, “leverage theory” is different. Leverage theory (offensive leveraging) is the concept that if an undertaking produces a product in a market where it possesses market power, market A, then by tying it with a product in competitive market B, it can extract double monopoly profits, that is, charge a monopoly price on both products, increasing its monopoly profits.²¹ But this is clearly a different concern to that expressed in *Standard Oil*. The concern expressed in *Standard Oil* is based on ensuring the customer has the freedom to choose the combination of products that is most suitable to them, it is about freedom of choice. In contrast leveraging theory relates to the level of profit made by the monopolist. They are two separate ideas related to two separate competitive issues: restriction of freedom and monopoly profits. This can be illustrated by considering a simple example, if a monopolist tied two products together (previously sold at X monopoly price and Y competitive price) and sold them at the price (X + Y), this would still be a problem under the *Standard Oil* case, but it would not be an example of offensive leveraging. This is because it would still affect consumer freedom even though the total price would be no greater than if the products were available separately. Therefore the concern for consumer freedom should not be equated with leveraging theory. As a consequence of this confusion, Waelbroeck then appears to treat the arguments that have been levelled against offensive leveraging theory as arguments against the approach that the Commission and courts have used to decide the tying cases that have come before them. This is not appropriate. It will be shown in this chapter (and in the following chapters) that the

²¹ Jones and Sufrin, *EC Competition Law* (4 edn, OUP, 2010), 456; it should also be noted that this simplistic form of leveraging theory has been successfully undermined, see the Chicago School view on leverage theory: Ward S. Bowman, ‘Tying arrangements and the leverage problem’ (1957-1958) 67 *Yale L.J.* 19, 20; Richard A. Posner, ‘The Chicago School of Antitrust Analysis’ [1979] 127 *U. Pa. L. Rev.* 925, 929; Robert Bork, *The Antitrust Paradox* (New York, The Free Press 1978) 372-373.

Commission and courts tying cases have been decided on the basis of customer freedom, that is, a similar concern as expressed in *Standard Oil*, but *not* the same problem as the leveraging of market power to gain additional monopoly profits. Therefore it is not appropriate to set up criticism of leveraging as criticism of the EU approach, they are not the same.

It is possible that the reason for this confusion is due to the period in which Waelbroeck was writing. In 1987 there was very little case law from the EU on tying and consequentially little precedent on how it was applied and what harm it was seeking to prevent. Most of the major tying cases²² had not yet taken place. In contrast in the United States there had already been a great deal of judicial comment on tying.²³ Further at that point leverage theory was strongly associated with the tying prohibition in US law.²⁴ It is not surprising then that, in the absence of EU case law, and with the comparative abundance of US case law and the theories of harm underlying it that at this time commentators such as Waelbroeck may have taken EU law to be based upon the same theories of harm as in the US. But as explained above, this is not the case, leveraging is not mentioned in the EU case law as a concern of tying, neither is double monopoly profits.

It appears that this misconception was also present in the work of another commentator. Goyder, for example in the third edition of his textbook published in 1998²⁵ finally gives a theoretical explanation as to how tying could harm competition. He also suggested that the potential damage that tying could cause was that the tied product could be sold above market price even though it could be bought elsewhere on better terms.²⁶ Goyder then also links tying with leverage theory but he gives no reference linking this explanation of harm to any of the case law or decisions of the Commission and courts. Neither is any reference given to the source of this theory of harm

²² Discussed below

²³ See above at note 18 and Keith K. Wollenberg, 'An Economic Analysis of Tie-In Sales: Re-examining the Leverage Theory' (1986-1987) 39 *Stan. L. Rev.* 737, 740

²⁴ *ibid*

²⁵ D. G. Goyder, *EC Competition Law* (3rd edn, OUP, 1998)

²⁶ D. G. Goyder, *EC Competition Law* (3rd edn, OUP, 1998) page 350

or any explanation of why he thinks that this is the underlying concern that the Commission and courts are seeking to address.

It can be seen then that during this period, the law on tying had not drawn a lot of interest from EU competition law scholars. While there were Commission decisions and some case law, this was relatively limited and had not drawn great attention from commentators. Those who had taken the time to study the decisions of the Commission and courts appear to assume that the EU reason for pursuing tying was the same as that in the United States. It will be argued below that this is not the case.

The next part of this chapter seeks to fill this gap in the literature and present the actual test used to determine tying and the economic concerns underlying it. This will then be supported by an analysis of the Commission decisions and case law of the EU courts, demonstrating that the concern of the EU competition enforcement authorities is the freedom of the customer to choose the products they prefer and the protection of market entry. It is not the prevention of increased monopoly profits due to the extension of monopoly from one market to another.

3.0 Ordoliberalism in the Approach to Tying: Customer Freedom

3.1. The significance of the mono-theoretical period

One of the most important issues that is explained by the case law during the mono-theoretical period relates to how the Commission and the courts determined that a tie actually existed. During this time there was never any consideration given by the Commission or courts to a requirement of “separate products”. Likewise there was no discussion within EU Competition law articles on the difficulties associated with distinguishing between separate products and integrated systems. This was the case despite the fact that the argument that two tied products could be claimed to be a single system was

raised by both *Hilti* and *Tetra Pak*.²⁷ This is significant because in the next period, discussed in Chapter Five, the requirement of “separate products” was explicitly stated in *Microsoft I*,²⁸ this gave a new focus within the academic literature on what constituted separate products and whether it was really practical to have such a test.²⁹ Due to the relatively little attention given to tying during the mono-theoretical period and the great attention given after it is very easy to assume that the *Microsoft I*'s test was merely a concise articulation of what had always been the EU competition approach to tying. It will be shown that this is not the case.³⁰

This section will show that contrary to what may be implied later developments, during this period there was no requirement of separate products to find a tie. Rather what can be determined from the Commission decisions and case law from this period is that in order for there to be a tie that breaches Article 102 TFEU a restriction of customer freedom caused by the tying practice had to be established. The test applied to determine if a tie existed was not concerned with showing definitively what is to be classed as two products and what is to be classed as one. Rather the aim was to establish how customers themselves wished to purchase the products and whether there was any legitimate reason to restrict the freedom of customers to purchase the products in the manner they saw fit. This will be called simply the “choice test” or the “customer freedom test”. This test can be described as follows:

²⁷ Eurofix-Bauco v Hilti (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19, para 57; Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 118

²⁸ Microsoft (Case COMP/C-3/37.792) Commission Decision [2005] 4 CMLR 965

²⁹ These questions will be addressed in the next chapter. Hedvig Schmidt, ‘Article 82: is technological integration checkmated?’ [2009] Journal of Business Law 354, 368-369; Jean-Yves Art, Gregory v.S. McCurdy, ‘The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure’ [2004] European Competition Law Review 694, 698.

³⁰ It can be noted that the concept of customer choice has been identified as an element of tying abuse after Microsoft I (see Jones and Sufrin, EC Competition Law (4 edn, OUP, 2010), 517) however this appears only to be established by reference to the Microsoft I decision and as such sits uneasily aside the test established in Microsoft. This chapter and the following seek to show that not only was customer freedom always a priority for the Commission and courts, including prior to the Microsoft I decision, but further it was the primary point of reference for the Commission and courts in ascertaining when tying was taking place.

- 1) Are there consumers³¹ who wish to purchase the tying good free from the tied good?
- 2) Is it practically possible to provide the two elements separately?
- 3) Does the undertaking lack objective justification for the tie?

If the answers to the questions above are “yes”, it can be deduced from the case law that the dominant undertaking is restricting the freedom of customers and this is the breach of EU competition law, namely Article 102(d) TFEU. When viewed in this manner the importance of dominance (a requirement for finding Article 102 abuse) became obvious. This is because if an undertaking does not have market power in one of the product markets then it cannot restrict the freedom of customers, they will simply purchase their combination of products elsewhere. It is only when an undertaking is dominant in one of the markets it is able to effectively constrain the freedom of customers to purchase their desired mix of products.

By reference to the tying decisions and case law of the Commission and courts it will be shown below that the Commission and courts were concerned, not with establishing whether two products/services could be considered two products/services or a single system/service, but rather they sought to ascertain whether the elements of the alleged tie *could* be sold independently. At times this included the EU competition enforcement authorities considering the physical distinction of the products and the differing functions of products and services in order to show that they *could* be sold independently and that there was no reason why they had to be sold together. Once it was established that the elements *could* be provided independently, along with customer demand patterns demonstrating that customers wanted to purchase them independently, in the absence of objective justification there was a tie.

³¹ This is presumably subject to the number of consumers being ‘not insignificant’, although this was not articulated until Microsoft, see; Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965 para 806 and T-201/04, Microsoft v Commission [2007] ECR II-3601, para 917, 932

3.2.EU Tying Commission Decisions and Case Law: Evidence for the Customer Freedom Approach

The way tying cases have been decided will be discussed here in chronological order. This provides the additional benefit of illustrating the way the terminology used in tying decisions has changed slightly over time³² while showing that the test itself has in fact remained the same throughout.

3.2.1. Case 311/84 Centre Belge d'Etudes de Marché-Télémarketing v. Compagnie Luxembourgeoise de Télédiffusion (CLT) and Information Publicité Benelux (IPB) [1985] ECR 3261

The first tying case of relevance is *Centre Belge*. Here the defendants, a radio and television station based in Luxembourg with a legal monopoly granted by the state, refused to allow advertisers who wished to advertise on the station from using their own telephone number when advertising the sale of products, but rather required them to use the station's own telemarketers. This thereby tied the sale of advertising airtime to the TV station's own telemarketing service. This limited commercial freedom of the advertisers and prevented other telemarketers from competing with the TV station's own. The Court of Justice held that it was an abuse when a dominant undertaking decides to refuse to supply an undertaking on a neighbouring market which it is trying to penetrate if there is no good reason.³³ That is to say that CLT refused to supply television advertising to undertakings such as Centre Belge that had their own telemarketers (the neighbouring market), a market that Centre Belge was trying to penetrate. If a company does refuse to supply in such a way, without "objective necessity" (commercial or technical necessity), but instead for the purpose of reserving an ancillary activity to itself with the possibility of eliminating all competition from another undertaking, this will be considered abusive.³⁴ In determining what an ancillary activity is, the Court merely said that it was wrong to reserve an activity which *might* be carried out

³² "refusal to supply X without Y" being used in earlier cases while "tying" being used in later cases

³³ Case 311/84 Centre belge d'études de marché – Télémarketing (CBEM v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB) [1985] ECR 3261, para 23

³⁴ *ibid* para 26

by another undertaking as part of its activities on a neighbouring but separate market.³⁵ This broad definition of what constituted two services had been put forward by the Advocate General Lenz who said:

“Where such an undertaking reserves to itself or to a subsidiary under its control, to the exclusion of all other undertakings, an ancillary activity which *could* be carried out by another undertaking as part of its activities, its conduct amounts to an abuse of a dominant position.”³⁶

The main point to note in this case is that whether or not a contract for service could be characterised as a single service or two separate services is irrelevant. What is decisive before the Court is whether the reserved activity *could* be carried out by another undertaking. The test could be expressed as: is there any logical reason why the customer cannot be the one left to choose which combination of services they want? If the answer is “no” then the tie is an abuse. This is the cornerstone of the “choice test” relied upon by the Court.

3.2.2. Case T-30/89 *Hilti AG v. Commission* [1990] ECR II-163.

Hilti was the next tying case decided after *Centre Belge*. This case was the first that concerned products as opposed to services being tied. Hilti’s nail guns required three additional consumables to work. The first was the nail to be driven into the surface. There was no intellectual property protection for these nails.³⁷ The second consumable was a cartridge strip. These are strips that hold the cartridges and they were patent protected to the extent that Hilti sold virtually all the cartridge strips for its own guns and, in the UK at least, any cartridge strip design that could function effectively in a Hilti nail gun would very likely breach Hilti’s patent.³⁸ The third item was the brass cartridges. These act like the cartridge element of a bullet, in the sense that they contain powder and when activated provide the momentum to force the

³⁵ Case 311/84 *Centre belge d’études de marché – Télémarketing* (CBEM v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB) [1985] ECR 3261, 27

³⁶ *Ibid* Opinion of Advocate General Lenz, para C(2)

³⁷ *Eurofix-Bauco v Hilti* (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19, para 67

³⁸ *ibid* para 19, 66

nail into the surface desired. These were not patent protected and were already freely available.³⁹ The nail guns themselves were also patented.⁴⁰ Hilti claimed that there were not two markets but one for powder fastening systems, which encompassed nail guns, cartridge strips and nails. The Commission had to decide whether this was correct for the purpose of market definition. Although it was expressed that it was an abuse of a dominant position for an undertaking to refuse to supply certain products separately in the case summary,⁴¹ there was nothing in the official text that mentioned separate products. Rather the Commission defined the appropriate market here through supply and demand. It said that, “although they are interdependent, guns, cartridge strips and nails are subject to different conditions of supply and demand”.⁴² Therefore cartridge strips, nail guns and nails were different markets. It is argued that supply and demand is very important in the choice test because it establishes how customers wish to purchase products when given free choice, whether they buy them separately or together. It will be argued later that this represents an Ordoliberal concern to preserve the economic freedom of market actors.

³⁹ Hilti (n 37) para 12, 66

⁴⁰ Ibid para 12

⁴¹ See paragraph 5 of the case summary.

⁴² Case T-30/89 Hilti AG v Commission [1991] ECR II – 1439, para 18, 55, 57

3.2.3. Napier-Brown- British Sugar

In Napier Brown – British Sugar, British Sugar “refused to supply” sugar to its customers unless they also accepted British Sugar supplied the service of delivery too. This was also condemned by the Commission as the reservation of an ancillary activity which “could” be undertaken by an individual contractor acting independently.⁴³ The Commission went on to say that they were not aware of any objective necessity requiring the reservation of such an activity to British Sugar.⁴⁴ Using a similar phraseology as in *Centre Belge* the Commission said that:

“The Commission considers that [British Sugar] has abused its dominant position on the sugar market by refusing to grant to its customers an option between purchasing sugar on an ex factory or delivered price basis, thereby reserving for itself the ancillary activity of the delivery of that sugar, thus eliminating all competition in relation to the delivery of the products.”⁴⁵

This again demonstrates that the concern of the Commission was the lack of an objective need for the tying of sugar with delivery. The Commission was not asking the question, “could sugar and delivery be considered a single product/service” rather it was asking is there any objective reason why British Sugar should be allowed to refuse customers the option to choose. This is the choice test.

3.2.4. London European

The next decision delivered by the Commission was that of *London European* in 1988.⁴⁶ This case provides a good example of the quick function/physical

⁴³ Napier Brown – British Sugar (Case IV/30.178) Commission Decision 88/518/EEC [1988] OJ L 284/41, para 69

⁴⁴ *Ibid* para 70

⁴⁵ Napier Brown – British Sugar (Case IV/30.178) Commission Decision 88/518/EEC [1988] OJ L 284/41, para 71

⁴⁶ *London European* – Sabena (IV/32.318) Commission Decision 88/589/EEC [1988] OJ L 317/47

distinction style of evaluation of products/services that was taken by the Commission during this period. Here the two services that were tied were 1) access to a computer system that allowed travel agents to book flights online and 2) aircraft handling contracts. In distinguishing the two allegedly tied products the Commission said simply that the two contracts were not connected. One was a computer reservation system and the other was a contract for handling aircraft on the ground.⁴⁷ In other words they had totally separate functions. The defendants were found to be making the conclusion of a contract subject to the conclusion of a separate unrelated contract as expressly prohibited by Article 102(d) TFEU. Little evaluation was given as to whether it was a single service beyond a description of their differing purposes, and their benefit to completely different elements of the transport process. Thereby showing that once again the test was not whether there were objective distinctions between the two services allowing them to be considered separate, rather the aim was to assess whether there was a reason why the services needed to be sold together. If there was no reason and customers want to purchase the services separately then there was a tie.

3.2.5. Tetra Pak II

The *Tetra Pak* case was the first case where the separate products issue appears to have been raised as a defence to tying, rather than in relation to market definition.⁴⁸ Tetra Pak argued that they were not tying cartons to filling machines because what they sold was a “packaging system”, therefore they could not tie a single unit to itself. They also provided secondary arguments including that there were natural links between the products⁴⁹ and suggested that only Tetra Pak cartons would work effectively with Tetra Pak machines. The Commission did not appear to give much specific reasoning on the point

⁴⁷ London European – Sabena (IV/32.318) Commission Decision 88/589/EEC [1988] OJ L 317/47, para 31

⁴⁸ As in Hilti

⁴⁹ Putting the tie potentially outside the ambit of Article 102(d)

of combined products at all,⁵⁰ but appeared to rebut both the natural links argument together with the “packaging system” argument on the basis of physically distinct characteristics.⁵¹ It is also important to note here that the Commission promptly dealt with the argument that only Tetra Pak’s cartons would work properly with Tetra Pak machines by explaining simply that if there was “genuinely no technical alternative, such an obligation is unnecessary”⁵² and therefore it would not need to be incorporated into a contract. This is relevant because it further develops the *Centre Belge* decision and Article 102(d) TFEU which states that two services could not be combined if there was not technical or commercial necessity. Reading this element of the *Centre Belge* decision together with the points raised by the Commission in *Tetra Pak*, it could be questioned whether or not technical necessity could ever realistically be used as a ground for incorporating a tying clause into a contract. Should the undertaking be genuinely concerned with technical standards, the court will declare (as in this case) that there are other technical solutions such as the publication of standards and specifications, and legal recourse through general liability should a third party produce inferior products. The Commission went on to say that “the proportionality rule excludes the use of restrictive practices where these are not indispensable”.⁵³ So this can be seen to demonstrate a narrow view from the Commission of what it considers an acceptable reason for using a tying clause in a contract and suggests that the Commission will not allow safety considerations to be used as a pretext for tying practices.

The General Court supported the Commission’s decision. It considered whether or not the tying of Tetra Pak’s machines and cartons was in accordance with “commercial usage”. The Court suggested that it was not in accordance with commercial usage because there were several independent manufacturers who had no involvement in machine manufacturing but made

⁵⁰ Korah argues that generally there is a lack of economic analysis, particularly Tetra Pak II, see Valentine Korah, ‘The paucity of economic analysis in the EEC decisions on competition Tetra Pak II’ [1993] 46 Current Legal Problems 148

⁵¹ Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 119, see above.

⁵² *ibid*

⁵³ *ibid*

cartons for use in other manufacturers' machines.⁵⁴ It went on to say that even if it was normal, such usage would not be sufficient to "justify" recourse to a system of tied sales by a dominant company.⁵⁵ This again shows that dominant undertakings may find it very difficult to use "commercial usage" as a justification for their tie, if the Court believes that supply and demand patterns indicate that customers would rather purchase the tied product separately.

On appeal to the Court of Justice, Advocate General Ruiz-Jarabo Colomer went further again and stated that tying the sales of products which are "by nature separable" constitutes an abuse. In his view, the products were, "not by nature *inseparable* nor did commercial usage in the sector *require* tied sales".⁵⁶ To support this argument, he also raised the fact that there were undertakings which only produced cartons that were used in conjunction with other undertakings' machines. The fact that Tetra Pak undertook to abandon its system of tied sales was also used as evidence of this. He agreed with the decision of the General Court that even if such a usage was normally acceptable it would not be acceptable on an uncompetitive market.⁵⁷ In summary the Advocate General argued that if it is possible to separate products and it was not required by commercial practice to tie the products, then to do so would constitute an abuse unless objectively justified. He said that only in "exceptional circumstances" a dominant undertaking may be justified by the nature of commercial usage of the products themselves.⁵⁸

The Court of Justice did not explicitly endorse Advocate General Ruiz-Jarabo Colomer's statement, but did rule that a tie that is in accordance with commercial usage or has a natural link between the two products may still be an abuse unless there is objective justification.⁵⁹

⁵⁴ Case T-83/91 Tetra Pak v Commission [1994] ECR II – 762, para 82

⁵⁵ *ibid* para 137

⁵⁶ Case C-333/94 P Tetra Pak v Commission [1996] ECR I – 5951 Opinion of AG Ruiz-Jarabo Colomer, para 69

⁵⁷ *ibid* para 70

⁵⁸ Case C-333/94 P Tetra Pak v Commission [1996] ECR I – 5951 Opinion of AG Ruiz-Jarabo Colomer, 70

⁵⁹ Case C-333/94 P Tetra Pak v Commission [1996] ECR I – 5951, para 37, see also (Case COMP/37.859) Commission Decision 2002/180/EC [2001] OJ L61/32, para 80 where it was

The *Tetra Pak* judgments are very important. They demonstrate that seller supply patterns (which reflect customer demand) are part of the process of determining whether or not a system is to be considered to be a tie or not. This is because “commercial usage”, whether or not other undertakings in the market also tie all their sales is another way of analysing how customers wish to purchase their cartons. If all customers wanted to purchase their cartons from their machine manufacturers the only undertakings in that market would be machine manufacturers. The fact that there were independent manufacturers of cartons was a proxy measure to demonstrate that customers wanted to be able to source their cartons from undertakings other than their machine manufacturer since that was what they were choosing to do before the tie. Relating this to step 1 of the test above, the Commission and the General Court established that customers wanted to buy their cartons separately, and therefore in the absence of a reason why this ought not be the case, they should have the freedom to choose. If it is possible to sell the elements separately and there is sufficient customer demand for those elements to be sold separately then in the absence of objective justification the dominant undertaking should provide them separately. The dominant undertakings should not use their dominance to restrict the freedom of customers. Essentially, this principle plays an important role in giving effect to the desires of the customer and maintaining their economic freedom.

3.3. The true test of a tie: *can* the products be sold separately?

The competition enforcement authorities when determining whether or not a tying practice was unlawful, were not concerned with asking if the products could be classified as a single integrated system. They did consider, on occasion, whether or not the products were physically distinct.⁶⁰ This is because the question that the competition enforcement authorities were really concerned with was not, “are these two separate products?” but rather “could they be sold as two separate products?” If there was no reason why a “system”

said that there was no reason why a tie would contribute to the performance of the task assigned to La Poste, therefore this seemed to be an evaluation of potential objective justification.

⁶⁰ *Tetra Pak II* (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 119

could not be broken down into separate products or services then there was no reason to allow the dominant company to prevent this from happening. After all, if there was a genuine benefit to having the products supplied as a tie, then the consumers would see this benefit and would choose to purchase them both together of their own accord. If there wasn't any benefit to the consumer, then the benefit must be for the dominant undertaking alone and as such it was not appropriate for the dominant undertaking to benefit at the cost of customer choice and potentially at the cost of other competitors that play an important role in constraining the dominant undertaking's dominance.

Therefore it is possible to see that the fact that two elements of a tie were physically distinct or served differing functions was not related to determining whether they were "separate products" but rather it was part of establishing whether the elements of the tie could be sold separately or whether they had to be sold together. There is no reason why a nail gun cartridge strip has to be sold alongside its nails just as there is no reason why sugar has to be delivered to the customer by the company that makes the sugar. There is no reason why a company that has an electronic system for booking flights must also service the aircraft making those flights while they are on the ground. There is no justification for this behaviour other than to benefit the dominant undertaking and so these ties were considered abusive. If there was some sort of benefit that would assist the customer in any way, then first, this would be an incentive for the customer to buy their product without the seller having to resort to contractual tying and second, this could be raised as an objective justification. The fact that there is no such incentive or justification is seen by the Commission and the courts as evidence that the only beneficiary is the dominant undertaking, to the detriment of customer choice. It will be argued in the section below that this, in the absence of any superior economic method of determining consumer harm, is an excellent way of determining anti-competitive tying.

It should be noted that there is a specific class of exception to rule that a tie that provides no incentive for the customer to purchase it and that has no

objective justification will be considered abusive.⁶¹ The exception is that where there is a state granted legally monopoly, a tie may be prohibited even when there are possible objection justifications, such as increased efficiency. In the cases of *Centre Belge* and *De Post/La Poste* there could arguably be efficiency justifications for the ties that were occurring.⁶² To take the strongest argument that could be made for efficiency; De Post/ La Poste was interested in tying their business mail with their normal mail. It could be argued that there are great efficiencies to be obtained if the post delivery company that is already dealing with a client's regular mail also deal with their business mail. For example, the postal company is likely to already be sending couriers to their premises to pick up their normal mail and therefore it would be a cost saving to also pick up their business mail while they are doing so, rather than having two separate companies sending two separate couriers to come and pick up the mail at different times in the day. However, the reason why De post/La Poste drew the ire of the Commission is related to the fact that they had a legal/statutory monopoly that they were seeking to extend through contract law.⁶³ After all a legally conferred advantage is one that would be very difficult to challenge commercially. If a competing company cannot enter both the tying and the tied market and the dominant company refuses to supply the legally protected product without the competitive product, then all those who are dependent on the legally protected product are forced to switch to the legally protected provider. If this is a large number of customers this may have the effect of making the continued presence of the competitor in the competitive market unprofitable and force them out of the market, *ipso facto* extending the legal monopoly into a market that it was never intended to cover. This is highly likely to be seen as damaging to competition in the market and therefore not taken likely by the Commission and courts. Ergo, it is argued that cases involving tying a product or service that is legally protected from competition are exceptional cases and subject to greater scrutiny. As a result

⁶¹ Subject to the elements being subject to independent customer demand and the dominant undertaking allowing the customer no freedom to purchase the goods/services separately

⁶² Such arguments were not considered in these judgements, but even if they were it is argued that they would be rejected.

⁶³ De Post-La Poste (Case COMP/37.859) Commission Decision 2002/180/EC [2001] OJ L61/32, para 73; this may equally apply to Centre Belge, however it was not specified within the text of the relatively brief judgement.

it may be that such ties will be found to be abusive even when there is some sort of efficiency that could be argued as an objective justification. This demonstrates a desire to protect free markets from state monopolies that are seeking to extend their remit further than legally intended and in the process damage competition in those markets.⁶⁴

So in summary it can be seen that the requirement of the existence of a separate product was never actually established during this period. Instead the competition enforcement authorities were concerned with whether a product *could* be sold separately. The difficulty that arose later however was that while, for example, the delivery for sugar and sugar itself are clearly separate products/services that can be provided separately without difficulty, there are other potential “ties” that are not as clear cut.⁶⁵ The first of which to come before the Commission was the *Microsoft I* case.⁶⁶ As a consequence the Commission attempted to enunciate the rules on tying more “clearly” for the first time and it is argued that this led to “separate products” being erroneously declared a requirement for tying abuse and thus for the first time drew academic attention to the concept.⁶⁷ In reality, prior to *Microsoft I*, the EU competition enforcement authorities had actually been concerned with whether products *could* be sold separately. This was because by ensuring that products that could be sold separately were sold separately (when there was a pattern of demand) this maximised the customer’s freedom to choose the combination of products and suppliers that most suited them. This maintenance of freedom of choice was the actual test of the EU competition enforcement authorities. The reasoning behind this concern for customer freedom will be explored in the following section.

⁶⁴ It is difficult to attribute this concern with a specific economic theory of competition as all of the major competition theories would be adverse to the extension of state control of markets. However it is possible that this is a manifestation of the “as if” standard endorsed by Ordoliberalism as discussed below.

⁶⁵ This ‘grey’ area will be discussed in the following chapter in relation to Microsoft.

⁶⁶ Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965

⁶⁷ Hedvig Schmidt, ‘Article 82: is technological integration checkmated?’ [2009] *Journal of Business Law* 354, 368-369; Jean-Yves Art, Gregory v.S. McCurdy, ‘The European Commission’s media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure’ [2004] *European Competition Law Review* 694, 698. These questions will be addressed in the next chapter.

4.0 Customer freedom: the real test for tying and its intended aim

It is argued in this thesis that the EU Commission and courts have pursued a doctrine of protecting customer freedom. The purpose of this section is to demonstrate that the competition enforcement authorities of the EU have applied a doctrine of law in relation to tying that is intended to protect the customer's freedom and that by understanding this it is easier to understand how tying itself was determined. It is argued that during this period, the question posed by the enforcement authorities when seeking to establish a tie can be summarised in one single question: "Is there any reason why the customer should not be able to choose their own combination of products?" If there is no objective reason why they cannot, subject to the tying undertaking being dominant and there being customer demand, the tie is considered unlawful and in breach of Article 102 TFEU.

The test can be phrased as follows:

- 1) Are there consumers who wish to purchase the tying good free from the tied good?⁶⁸
- 2) Is there any reason why it is not possible to provide the two elements separately?
- 3) Is there any objective justification as to why the two elements should not be provided separately?

Essentially parts 2 and 3 could be combined into one step. However they are separate here in order to separate the basic question of whether the two elements *can possibly* be provided separately and the far more difficult question of whether there are sufficient efficiency benefits to justify the tie. In reality question 3 will almost always be answered "no" in practice.⁶⁹ This is because if, assuming the elements were sold separately, sufficient customers

⁶⁸ This is presumably subject to the number of consumers being 'not insignificant', although this was not articulated until *Microsoft*, see; *Microsoft* (Case COMP/C-3/37.792) [2005] 4 CMLR 965 para 806 and T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 917, 932

⁶⁹ In the EU context.

would buy the tying good alone, then the tie could not be more efficient to those customers than providing the product separately otherwise they would have bought the goods together. And if the combination was so efficient that customers would almost always choose to purchase the products together then there would be insufficient demand for the elements alone and part 1 would not be made out.

This appears to be based on the following principle, namely that the customer is in the best position to decide what fulfils their needs and therefore they should be in a position to decide what products they wish to purchase. If the combination suggested by the dominant undertaking truly is superior then customers will select this combination of their own accord, and if not, then this suggests that the customer favours sourcing their tied product from another supplier. If they do prefer sourcing the tied product from another supplier, this must be because it is superior in some way. Therefore there is no reason why the supplier of the superior product should be potentially removed from the market merely because of the dominant undertaking's market power in the tying product market.

In order to demonstrate that the customer choice/freedom test truly is the test that is used by the Commission and courts and the argument above underlines their reasoning the following four principles will be established by reference to Commission and court decisions:

- 1) It is an abuse of dominance to remove a customer's choice of supplier through tying;
- 2) This is because the customer is in the best position to assess their needs;
- 3) To objectively justify a tie there must be a benefit to the customer;
- 4) Tying limits access to the market for other suppliers

4.1. It is an abuse of dominance to remove a customer's choice of supplier through tying

It is argued that this principle is the foundation of the Commission and courts' test on tying. The concept is that primacy must be given to the customer's choice and freedom to choose the combination of products that suits them. This is why undertakings have been condemned when their policies, "leave the consumer with no choice over the sources of his [tied product] and as such abusively exploit him".⁷⁰ Similarly, it has also been considered to be an abuse when the defendant's behaviour, "restricts the consumers' ability to choose sources of supply."⁷¹ In the Commission decision of *Van den Bergh Foods*, a dominant ice cream manufacturer tied the provision of free refrigerators with the requirement that it only be used to stock their own ice cream. This was challenged as unlawful because it had the effect of "eliminating the *freedom* of a very substantial number... of retailers to stock and offer for sale to the consumer [the tied product] of any competing suppliers".⁷² Contrary to the retailers' interests, the agreements prevented the retailers from exercising their "freedom of choice" in the products they wished to stock.⁷³ This indirectly prevented consumers from exercising their freedom to purchase the products they wanted.⁷⁴ Therefore interference with retailers' freedom to choose the products and suppliers on the basis of the merits of the products themselves was considered abusive. Therefore the restriction of both customers and consumers, that is to say purchasers or indirect purchaser's freedom of choice will be considered harmful by the Commission.

This customer freedom test has been confirmed by the General Court in *Tetra Pak*⁷⁵ when it has shown a concern for behaviour that "deprives the customer of the ability to choose his sources of supply and denies other producers

⁷⁰ Eurofix-Bauco v Hilti (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19, para 75; see also: Case T-65/89 BPB Industries and British Gypsum Ltd v Commission [1993] ECR II – 0392, para 120

⁷¹ Flat Glass (IV/31.906) Commission Decision 89/93/EEC [1988] OJ L 33/44, para 80

⁷² Van den Bergh Foods Limited (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 265

⁷³ *ibid* para 266

⁷⁴ *ibid* para 266

⁷⁵ See above for case facts

access to the market.”⁷⁶ This demonstrates that the General Court, like the Commission, was primarily concerned with the exercise of freedom on behalf of the customer. In the same case, the aim of protecting freedom of choice was reiterated by Advocate General Ruiz-Jarabo Colomer. He stated that:

“an undertaking which is in a dominant position and ties purchasers directly or indirectly by an exclusive purchasing obligation⁷⁷ abuses its position inasmuch as it deprives the purchaser of choice as to his possible sources of supply and limits access to the market by other producers.”⁷⁸

Once again, the aim of the EU courts, Commission and the Advocate General is to protect the freedom of the customer to choose their own sources of supply.

4.2. The customer is in the best position to assess their needs

The belief that the customer is in the best position to assess their product needs is demonstrated by the way in which the Commission has treated proposed tying justifications. When Tetra Pak defended its tie by asserting that it was necessary on technical grounds because only their products were effective together the Commission explained:

“If there is genuinely no technical alternative, such an obligation is unnecessary. However, if such an alternative does exist, the *choice* should be left to the user.”⁷⁹

When the undertaking tried to defend their behaviour by saying that they sold a system that was superior when using their own consumables,⁸⁰ the Commission responded by stating that if that were true, such benefits would

⁷⁶ Case T-83/91 Tetra Pak v Commission [1994] ECR II – 762, para 137

⁷⁷ Which was tied to the sale of its packaging machines

⁷⁸ Case C-333/94 P Tetra Pak v Commission [1996] ECR I – 5951 Opinion of AG Ruiz-Jarabo Colomer, 70

⁷⁹ Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 119

⁸⁰ An argument likely to be both proffered and accepted by Chicago School thinkers, like Richard Posner, as they would consider that any consumer would, if contractually obliged to buy consumables, look at the product as a system and choose whichever system on the merits as a whole, see; Richard A. Posner, 'The Chicago School of Antitrust Analysis' (1979) 127 U. Pa. L. Rev. 925, page 929

be apparent to the user without it being necessary for the seller to resort to imposing a contractual obligation on the purchaser. It was made clear, that in the view of the Commission:

“it is up to the user, and not the producer, to compare such advantages with those offered by open systems, and to make his choice freely.”⁸¹

This clearly demonstrates that the Commission believes that the customer is in the best place to decide the best combination of products for them to purchase. If there is a benefit to using the dominant undertaking’s tied product, they will choose it of their own accord. It is the customer who knows their needs and not the supplier.

4.3. An objective justification requires benefit for the customer

Where it is established that there is a reduction in the customer’s freedom and there is no objective justification for the tie it will be considered to be an abuse. What is also true is that within the term objective justification is an implicit understanding that any benefit of the tie cannot be for the supplier’s benefit alone. If the only benefit is for the supplier the Commission will consider the tie unfair.⁸² An objective justification must include some sort of benefit likely to be received by the consumer/customer.⁸³ This approach appears to imply that if there is no objective justification given by the dominant undertaking then it will be assumed that any benefit from the behaviour is for the benefit the dominant undertaking alone. This notably departs from a Chicago School view of welfare (aggregate welfare) and appears to be more similar to the post-Chicago concept of consumer welfare.

⁸¹ Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 119

⁸² Van den Bergh Foods Limited (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 270

⁸³ This concern continues into later periods, see: Commission, ‘Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings’ (Communication) (2009) OJ C 45/02 para 30; Tjarda van der Vijver, ‘Article 102 TFEU: How to claim the application of objective justifications in the case of prima facie dominance abuses?’ (2013) 4(2) Journal of European Competition Law & Practice 121, 129; Albertina Albors-Llorens, ‘The role of objective justification and efficiencies in the application of article 82 EC’ (2007) 44(6) Common Market Law Review 1727, 1758

4.4. Tying limits access to the market for other suppliers

If a tie does not benefit the customer (and if it did presumably that would have been raised as an objective justification) either the tie has no purpose, which is unlikely, or the tie is exclusively for the benefit of the dominant undertaking. The sort of behaviour that would have no benefit for the customer but would benefit the dominant undertaking is likely to be that which hinders access to the dominant undertaking's market. After all if there was a benefit, such as reduced costs for the undertaking, this could be argued to be passed on to the customer through lower prices. The type of benefit that cannot be passed on is a reduction in competition. This assumption is never stated expressly; instead the Commission and courts have repeatedly specified that the effect of various tie-in agreements has been to limit access to the market. For example, it has been stated in *Van den Bergh Foods* that the effect of the tie was to prevent market penetration and expansion on the basis of the merits of the product.⁸⁴ In *Tetra Pak*, the General Court said that the danger of a tie was that it "denies other producers access to the market"⁸⁵. This was also supported by Advocate General Ruiz-Jarabo Colomer who said that:

"an undertaking which is in a dominant position and ties purchasers ... limits access to the market by other producers."⁸⁶

Therefore, while it is not stated as an absolute relationship,⁸⁷ the competition enforcement authorities are often wary that where an undertaking cannot objectively justify a tie or induce customers to purchase the combination of their own accord, the benefits of that tie, are likely to be the restriction of competition not in the customers' interest but rather for the benefit of the dominant undertaking.

⁸⁴ *Van den Bergh Foods Limited* (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 266

⁸⁵ Case T-83/91 *Tetra Pak v Commission* [1994] ECR II – 762, para 137

⁸⁶ Case C-333/94 P *Tetra Pak v Commission* [1996] ECR I – 5951 Opinion of AG Ruiz-Jarabo Colomer, 70; see similarly Case C-310/93 *BPB Industries and British Gypsum Ltd v Commission* [1995] ECR I – 0865, Opinion of AG Léger, para 876 where it was said that "by reason of such contracts access to the market has become difficult or impossible for competitors"

⁸⁷ That is where any producer that ties a dominant product with another will always limit access to the market.

To summarise, establishing a tie does not depend upon some sort of inherent quality that can be used to distinguish where there are one or two products. On the reasoning of the Commission and courts at this time, the label or tag that was attached to a product/s system/s or service/s was totally irrelevant. The fact that a consumer/customer/retailer wanted to purchase the products from separate suppliers, combined with the fact that those products *could* be sold separately and that there was no objective reason why the undertaking should refuse to sell them separately meant that the undertaking had restricted the freedom of choice exercised by customers and ultimately consumers. This is what was truly relevant when establishing a tie. This is because it is for the customer to choose what they wish to purchase and it is not for the supplier to choose for them. That which restricts their freedom for no objective reason, provides no benefit to the customer and therefore is not permitted. This is particularly so if the true benefit to the dominant undertaking is likely to be that potential competitors find market access more difficult in the tied product market.

5.0 Customer freedom and the Ordoliberal influence

In this section, it will be argued that while customer freedom is a fundamental concern articulated by members of the Ordoliberal School of thought it is not the only aspect of Ordoliberal thought that is evident in the tying case law. Rather the law on tying (and broader competition law principles involved with tying) provide evidence of a number of concepts that are linked with Ordoliberalism.⁸⁸ The analysis undertaken in this chapter reveals further aspects of Ordoliberal thought contained within the decisions of the Commission, judgments of the courts and opinions of the advocate generals. These include the following: the requirement to behave ‘as it’ subject to competition, the definition of monopoly and the special responsibility of

⁸⁸ See chapter 1 for detailed consideration of Ordoliberalism.

dominant firms. It is argued that this is significant evidence of Ordoliberal influence on EU tying law.

5.1. Behaving “as if” subject to competition

Beginning with the *Centre Belge* judgment, the Court said that in order for an abuse to exist the undertaking must use its dominance and the resulting lack of competition to: “obtain advantages which it could not obtain if there were effective competition”.⁸⁹ This obviously bears a very strong resemblance to the requirement set out by the ordoliberal thinkers that, should there be circumstances where a monopoly exists or a “natural monopoly” exists, the dominant undertaking should be required to act “as if” it was subject to competition.⁹⁰ Consequently if an undertaking makes use of a benefit that would not be available if competition did exist, it is not behaving “as if” it is subject to competition. In *BPB*, the opinion of Advocate General Léger highlighted how the appellants, when seeking to demonstrate that they had not exploited their dominant position sought to show that they had not used their position to:

“obtain advantages which [they] would not have succeeded in obtaining if there had been effective competition”⁹¹

It is argued that the Advocate General is referring to the standard set by Ordoliberal thinkers.⁹²

⁸⁹ Case 311/84 *Centre belge d'études de marché – Télémarketing (CBEM v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB)* [1985] ECR 3261, para 21

⁹⁰ David J. Gerber, *Law and Competition in Twentieth Century Europe, Protecting Prometheus* (first published 1998, OUP 2001) p252, see also: Leonhard Miksch, *Wettbewerb als Aufgabe: Grundsätze einer Wettbewerbsordnung* (2d.ed Godesberg, 1947); Leonhard Miksch, *Die Wirtschaftspolitik des Als Ob* (1949) 105 *Zeitschrift für die gesamte Staatswissenschaft* 310

⁹¹ Case C-310/93 *BPB Industries and British Gypsum Ltd v Commission* [1995] ECR I – 0865, Opinion of AG Léger, para 38

⁹² David J. Gerber, *Law and Competition in Twentieth Century Europe, Protecting Prometheus* (first published 1998, OUP 2001) p252, see also: Leonhard Miksch, *Wettbewerb als Aufgabe: Grundsätze einer Wettbewerbsordnung* (2d.ed Godesberg, 1947); Leonhard Miksch, *Die Wirtschaftspolitik des Als Ob* (1949) 105 *Zeitschrift für die gesamte Staatswissenschaft* 310

5.2. Monopoly: the ability to act independently of competitors

When *Hilti* was being decided before the General Court, it was restated that a dominant position was characterised by the ability of an undertaking to behave to an appreciable extent independently of its competitors and therefore ultimately of customers.⁹³ This follows the pattern of market characterisation expressed by the Ordoliberal Walter Eucken explaining his empirical test to ascertain whether a market is a monopoly, partial monopoly, oligopoly or whether it is a competitive market.⁹⁴ In one instance the Commission even seemed to establish whether or not a dominant undertaking was subject to market conditions through the apparent reasonableness of the contractual terms it was evaluating, concluding that it was “barely conceivable” that an undertaking that was subject to market conditions would be able to coerce their customers to agree to such restrictive clauses.⁹⁵ This again demonstrates that the Commission seeks to establish dominance by reference to the Ordoliberal standard which is whether an undertaking can act independently of their competitors and consequently consumers. This definition applies generally when determining dominance under Article 102, not just to tying, but nonetheless it is important to consider it here as it provides more evidence of the Ordoliberal influence on tying law.

5.3.A special responsibility

Finally in EU competition law it is an established doctrine that a dominant undertaking has a special responsibility not to allow its conduct to distort competition.⁹⁶ This is a tenet of Ordoliberalism⁹⁷ suggesting again that this is a source of inspiration for the Commission.

⁹³ Case T-30/89 *Hilti AG v Commission* [1991] ECR II – 1439, para 3, this definition is originally taken from the leading case: Case 27/76 *United Brands v Commission* [1978] ECR 207, [1978] 1 CMLR 429 para 65, also repeated in: Case 85/76 *Hoffman-La Roche v Commission* [1979] ECR 461, [1979] 3 CMLR 211, para 38

⁹⁴ Walter Eucken, *Foundations of Economics, History and Theory in the Analysis of Economic Reality* (William Clowes & sons 1950) p138

⁹⁵ *Tetra Pak II* (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 146, see also Case C-333/94 P *Tetra Pak v Commission* [1996] ECR I – 5951 Opinion of AG Ruiz-Jarabo Colomer, para 60 “*Tetra Pak* also enjoyed freedom of conduct *vis-à-vis* other economic operators”

⁹⁶ Case 322/81 *Michelin v Commission* [1983] ECR 3461, [1985] 1 CMLR 282, para 57; repeated in various cases including: *Van den Bergh Foods Limited* (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 267 and *Trans-Atlantic*

5.4.Rejecting the Chicago School of Antitrust Analysis

The legal principles discussed above constitute evidence of an Ordoliberal influence on EU competition law. A second substantial finding of the analysis of the case law undertaken in this chapter is the implicit rejection of key aspects of the Chicago School of Antitrust.

These include rejecting “systems” arguments made by defendants, suggesting that markets are less than durable, recognising a number of barriers to entry and appearing to reject the aggregate welfare standard.

In *Tetra Pak*, the undertaking defended its actions on the basis that its machines and cartons constituted a single packaging system rather than two separate products; machines and cartons. Tetra Pak argued that it was sensible for it to pursue this policy and further it was entitled to do so because this allowed it to protect its reputation which is a legitimate interest.⁹⁸ Such an argument would have been acceptable if the Court was following a Chicago School line of thought.⁹⁹ The Commission rejected this explanation, arguing that it was actually trying to limit competition to the area most favourable to it, that being the market for machines where the technological barriers to entry were high.¹⁰⁰ Barriers to entry are themselves a concept largely rejected by the Chicago School of thought.¹⁰¹ This suggests that this decision was not made on the basis of Chicago School principles.

In the Commission’s decision in *Hilti*, the Commission stated that had it not acted and issued a statement of objections in the manner it did and caused Hilti to agree to an undertaking then a competitor would have been

Conference Agreement (Case IV/35.134) Commission Decision 1999/243/EC [1999] OJ L 95/1, para 567

⁹⁷ Christian Ahlborn and Carsten Grave, ‘Walter Eucken and Ordoliberalism: An Introduction from a Consumer Welfare Perspective’ (2006) 2 CPI 2 Autumn 197, 208

⁹⁸ Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 118; Similarly this argument was also submitted in the US Kodak case and similarly rejected there too; *Eastman Kodak Co v Image Technical Services Inc* (1992) 112 S.Ct. 2072

⁹⁹ Richard A. Posner, ‘The Chicago School of Antitrust Analysis’ [1979] 127 U. Pa. L. Rev. 925, 929; Robert Bork, *The Antitrust Paradox* (New York, The Free Press 1978) 372-373

¹⁰⁰ Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 120

¹⁰¹ Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 U.Pa.L.Rev 925, 928; Lisa Gormsen, *The Parallels between the Harvard Structural School and Article 82 EC and the divergences between the Chicago school and post-Chicago Schools and Article 82 EC* (2008) 4 *European Comp Journal* 221;

“irreversibly” removed from the market.¹⁰² While this does not indicate that the Commission is following a particular theory as such, it certainly suggests that the Commission does not share the Chicago School’s belief that markets are generally durable and resilient.¹⁰³ In other decisions, the Commission has indicated that it considered a strong brand and wide product range a barrier to entry¹⁰⁴ and it considered heavy demands on investment a barrier to entry,¹⁰⁵ again rejecting the Chicago School view that access to capital is not a prohibitive barrier to entry.¹⁰⁶ Further the Commission rejected the Borkian measure of welfare that suggests that any net increase in welfare can be sufficient to justify a particular behaviour.¹⁰⁷ Instead the Commission considered it discouraging that there was no guarantee that the benefit to the dominant company would eventually be passed on to the consumer.¹⁰⁸ All of these arguments suggest that during this period the Commission and courts have not followed a Chicago School line of thought when investigating tying.

5.5.Possible influences from the Harvard School

There are parts of the Commission’s decisions and Advocate General’s opinions that have made reference to interference with the structure of competition in that particular market.¹⁰⁹ There has also been reference to the particular idiosyncrasies of the markets themselves.¹¹⁰ This could be said to be characteristic of the Harvard (Structure-Conduct-Performance) school of

¹⁰² Eurofix-Bauco v Hilti (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19, para 100

¹⁰³ Michael S. Jacobs, An essay on the normative foundations of antitrust economics (1995) 74 N.C.L.Rev 219, 250

¹⁰⁴ Van den Bergh Foods Limited (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 195 see also para 244

¹⁰⁵ *ibid* para 197

¹⁰⁶ Richard A. Posner, The Chicago School of Antitrust Analysis (1979) 127 U.Pa.L.Rev 925, 929-930, 946

¹⁰⁷ See Steven C. Salop, ‘Question: What is the real and proper antitrust welfare standard?’ [2010] 22 Loy. Consumer L. Rev. 336

¹⁰⁸ Van den Bergh Foods Limited (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 240

¹⁰⁹ Case C-310/93 BPB Industries and British Gypsum Ltd v Commission [1995] ECR I – 0865, Opinion of AG Léger, para 46, Flat Glass (IV/31.906) Commission Decision 89/93/EEC [1988] OJ L 33/44, para 82

¹¹⁰ Case C-310/93 BPB Industries and British Gypsum Ltd v Commission [1995] ECR I – 0865, Opinion of AG Léger, para, 70 “In the Commission’s view, the damage caused by that practice was aggravated by the fact that plaster is a product for which it is difficult to change supply sources” and Van den Bergh Foods Limited (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 239 “consumers of impulse ice cream will not generally travel to buy or defer a purchasing decision.”

thinking.¹¹¹ However, the references are in no way distinctive enough to characterise them as a hallmark of Harvard thinking as opposed to similar themes running through Ordoliberalism or in some respects post-Chicago analysis.

To summarise, what can be seen from the case law between 1957 and 2004 is that the courts' and Commission's decisions show a number of clear influences of Ordoliberal thinking. They make reference to a number of concepts that are either expounded, valued or associated with Ordoliberal scholars. Secondly, they demonstrate an implied rejection of the Chicago School of thought by accepting or making arguments based upon ideas or theories that would be rejected by Chicago School scholars.¹¹²

¹¹¹ Lisa Gormsen, *The Parallels between the Harvard Structural School and Article 82 EC and the divergences between the Chicago school and post-Chicago Schools and Article 82 EC* (2008) 4 *European Comp Journal* 221, 222

¹¹² For example, references to barriers to entry due to brand reputation; see *Van den Bergh Foods Limited* (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 244

6.0 An Assessment of the EU position: is it justified?

The manner in which the EU competition enforcement authorities have dealt with tying during the mono-theoretical period has now been explained. The purpose of this following section is to assess whether the EU tying approach is justifiable from an economic stand point. The way this will be done is by using the Chicago School of Antitrust¹¹³ as a lens with which to criticise the approach. Arguments against the prohibition of tying that have been raised by Chicago School adherents will be put forward. It will then be argued that the approach used by the EU competition enforcement authorities is valid because it maximises customer welfare in the short term and it seeks to maintain competition in the long run in markets that already suffer from limited competition. In relation to this thesis as a whole, the purpose of this section is to argue that EU tying law is economically well-founded and is designed to achieve legitimate economic goals.

6.1. Economic analysis of EU tying law

Following what has already been discussed in Chapter Two on the Chicago School of Antitrust, Chicago School proponents such as Posner¹¹⁴ would argue that tying a system together makes no difference to economic efficiency and thus there is no reason to prevent this from occurring. To take an example provided by the facts of the *Tetra Pak* case, if cartons are tied to packaging machines, then the customer will consider the price of the whole system of machines and cartons. As a logical consequence if the customer finds that the system is less competitive than another system, for example an open system, then they will opt for that open system rather than that of Tetra Pak.¹¹⁵ Therefore if the consumer buys the Tetra Pak system it is because they have evaluated the value of the Tetra Pak system and they have

¹¹³ This form of criticism is not related to the single monopoly profit theorem as discussed in the above section.

¹¹⁴ Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 U.Pa.L.Rev 925, 929

¹¹⁵ *ibid*; Robert H. Bork, *The Antitrust Paradox: A policy at war with itself* (2nd ed, New York Free Press 1993) 436-39

evaluated the benefit of an open system and they have found that the Tetra Pak system is better suited to their needs. If the open system was more efficient then they would have selected that. Therefore if the competitors of Tetra Pak cannot make a system that is more efficient than Tetra Pak's overall, then they are the less efficient competitor and therefore should not be protected.

It is argued by this author that this argument can be undermined for two interrelated reasons:¹¹⁶

- 1) This does not maximise consumer welfare;
- 2) It does not factor in the long term value of having individual competitors that are more efficient at producing one particular product.

This will be considered below

6.1.1. Combined benefit verses individual benefit to the consumer

By preventing tied products being sold without objective justification the competition enforcement authorities are actually maximising the benefit to customers. It may appear to be protecting competitors, but it is only protecting them in so far as it prevents dominant undertakings from removing the freedom of customers to purchase the best combination of items on the merits of each product rather than allowing an undertaking to force customers to buy the best package of products because they have a particular product which the majority of customers need and is difficult to replicate due to complexity or intellectual property. This can be demonstrated using the following illustration:

Where the numerical value indicates the subjective value to the customer:

Dominant Company produces: Product A =11, Product B =4

Smaller Company produces: (cannot yet produce product A) Product B =5¹¹⁷

¹¹⁶ The arguments discussed here are based on consequences of such a policy. Arguments regarding the economic assumptions underlying such a line of reasoning (such as perfect information) are discussed in Chapter 2.

It is better to allow customers to choose product A from the dominant company and product B from the competitor (producing a value to the customer of 16) than allowing the dominant company to tie the products into a system that will still satisfy the needs of the customer although not as well (overall value to the customer of 15) if there is no objective reason A and B should be sold together.

The Chicago School would argue that there must be some reason why the undertaking has chosen to tie the products together in order to promote efficiency; otherwise they would not have done so. However if this was genuinely the case, such an argument would have been raised as an objective justification. Dominant undertakings have sought to raise arguments to justify their tying behaviour however their reasoning rarely stands up to judicial scrutiny.¹¹⁸

6.1.2. The Gradual nature of development

The Chicago School would also likely argue that if a dominant undertaking ties two products together then the answer is for its competitors to simply produce the other product in the system too. If it cannot do so, then it is less efficient and should not be protected. Taking the facts in Hilti for example, if Eurofix wants to sell nails, then they should just produce nail guns too, and if they cannot, then this is simply a demonstration that they are not as efficient as Hilti and therefore they are not being excluded by Hilti, but rather they are just less efficient and thus Hilti is able to out compete them. However, this is not true for reasons that will be discussed below.

The Chicago school suggests that if a company cannot produce a whole system, then it is not as efficient as its competitor and therefore is not entitled

¹¹⁷ This is the work of the author. The price of product B for both companies can be assumed to be the same. The subjective benefit of the smaller companies' product could be related to quality, features or any other desirable traits demanded by customers.

¹¹⁸ An oft cited example is a concern for safety. However upon investigation the dominant company has not carried out any of the other normal processes that might be expected if that was the case, such as raising their concerns with the national regulator responsible for ensuring products are safe or warning customers in writing (ie where their claims can be challenged by the manufacturer of supposedly unsafe products).

to protection. What this ignores however is that the development of products takes time. Generally the more complicated the product the more time and expense it is likely to take. With this in mind it can be seen that the purpose of a tying strategy is often to use the short term advantage that the dominant company has (having a successful efficient primary product already in production) in order to prevent the competitors in localised markets from developing their own in the long term. This is usually done by offering the dominant product (which is usually difficult to replicate¹¹⁹) on the condition that they also purchase the tied product in addition. In doing so this starves the competitor of funds because customers who need the tying product have to buy the tied system and as a consequence they will not purchase the tied product from the smaller competitor company. This deprives the competitor of funds and accordingly the time in the market place that it needs to develop the more challenging of the two products in order to compete successfully in both markets. This strategy can succeed because even though customers may prefer to get their tied products from the smaller company or and would benefit from the presence of more competitors in the market, they cannot go without the tying product during the period that their preferred supplier (the smaller competitor) cannot manufacture an effective form of the tied product.

It would be inappropriate to consider the smaller company inefficient just because it cannot produce both products *at that moment in time*. An undertaking may only be able to produce one element of a tied bundle at one particular stage, but that does not mean that given time the undertaking will not eventually be able to also efficiently supply the second product. This will be prevented from happening if the dominant undertaking is able to remove a competitor from the market simply because they are not yet at a stage where they can efficiently produce an entire system.

¹¹⁹ It is worth noting in support of this that in Hilti, Tetra Pak and British Sugar, the tied product was one that was very simple in contrast to the tying product. Respectively these were nails, cartons and delivery in comparison with nail guns and cartridges, liquid filling machines and monopolised sugar.

6.1.3. Gradual development and Defensive Leveraging

The idea that an undertaking may seek to keep neighbouring markets clear of competitors in order to protect their own dominant product is sometimes referred to as “defensive leveraging”.¹²⁰ This seems to implicitly recognise that undertakings are likely to enter markets and gradually expand into neighbouring markets. In *Hilti* the Commission noted when considering the defendant’s behaviour that “these policies all have the object or effect of excluding independent nail makers who may threaten the dominant position Hilti holds”.¹²¹ The Commission has also stated that “the only counterbalance to the dominant undertaking which is effective in the short term takes the form of smaller competing suppliers on the edge of the market.”¹²²

The concept of competitors expanding into adjacent markets is not just a vain hope of the EU competition enforcement authorities, but the commercial behaviour of the dominant undertakings themselves suggests that they too consider it to be a threat and seek to prevent it from happening. For example, in the *Tetra Pak* case it was noticed that Tetra Pak had taken over several competitors:

“[T]he takeovers of Selfpak, Zupak and Liquipak formed part of the same strategy ... All of them involved the elimination of competitors which, even if some were only modest in size, might in the long term have proved dangerous because they had developed or were seeking to develop packaging systems which might jeopardize Tetra Pak’s monopoly in the aseptic sector.”¹²³

Therefore Tetra Pak exhibited a concern for any competitor in a local competitive market that appeared capable of entering the less competitive market for aseptic packaging machines at some point in the future.

¹²⁰ Jones and Sufrin, *EC Competition Law* (4 edn, OUP, 2010), 457

¹²¹ *Eurofix-Bauco v Hilti* (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19, para 75

¹²² *DSD* (Case COMP D3/34493) Commission Decision 2001/463/EC [2001] OJ L 166/1, 116

¹²³ *Tetra Pak II* (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 166

Further for the purposes of this argument the circumstances of *Tetra Pak* actually provide a useful example of this “gradual competition development” in practice. The General Court noted that until 1987 Elopak (Tetra Pak’s competition in the non-aseptic sector, which was founded in 1957) only manufactured cartons and accessory equipment.¹²⁴ However since the decision protecting Elopak’s ability to sell cartons, the undertaking has started producing its own non-aseptic machinery and now even produces its own aseptic carton filling machinery thereby entering the market in which Tetra Pak itself was super dominant,¹²⁵ the same market that Tetra Pak was using to give itself an advantage when expanding in the neighbouring non-aseptic market. If Tetra Pak had been able to prevent Elopak from successfully selling cartons to the users of its machines it appears unlikely that Elopak would have ever been in a position to develop the technology needed to enter the market for aseptic filling machines and challenge Tetra Pak’s dominance. This of course is anecdotal; however it does provide a clear example of competitors in simple consumables, in time, moving into the primary market for more complex products and challenging the dominant undertaking’s position.

Hypothetically it is possible to argue that if competitors are removed from a market through tying and prices are raised by the potential monopolist then this will attract entry into the market from other competitors. However, it is argued that this ignores the realities of business life. It assumes that an undertaking can accurately assess when a price has been raised to a monopoly level. Generally this is will be true. Individuals, consumers and competing business are able to detect when a price has been raised to a monopoly level. But the more complicated the market, and the more complicated the product being produced in that market, the less able those un-associated with the market will be able to accurately assess the extraction of monopoly profits. After all when it is considered that even an established undertaking may not be able assess how much the development of a new

¹²⁴ Case T-83/91 *Tetra Pak v Commission* [1994] ECR II – 762, para 82

¹²⁵ <<http://www.elopak.com/language=en/1033/history>>, <<http://www.elopak.com/language=en/taps=1050/1532>> both accessed on 11/06/2011.

product/service is going to cost, if it is substantially innovative enough compared to its previous products/services, how can those totally unfamiliar with the market be expected to accurately assess these costs? Those outside of a particular market will have no familiarity with its trends, its peaks and troughs in demand, its main customers and clients, development time and intricacies etc. All these information costs put a competitor that is totally un-associated with a sector at a serious disadvantage when gauging whether or not to enter a market. The fact that small competitors or competitors in neighbouring markets often already have access to this information, or at least have a better understanding of it, means that they are first; unlikely to suffer high costs obtaining this information and second; are more likely to recognise when an opportunity, in the form of monopoly profits exist. Therefore if the Commission allowed undertakings to be foreclosed from a market by tying, they are not only preventing them from selling a potentially superior individual product just because they cannot yet sell both elements of a tie, but further they are allowing the removal of those who are most likely to recognise an opportunity to undermine the dominant undertaking's position if/when it arises.

Therefore in summary it is argued that the EU protects customer freedom for good reason. First, it preserves the freedom of consumers to purchase the combination of products that they wish to, preventing dominant undertakings from creating a situation where customers are forced to buy the best tie (rather than the best combination of individual products) when this favours them. This maximises customer welfare as customers are free to purchase a combination of products (from different suppliers) if this is of greatest utility to them and are free to buy the tie should this be preferable. Second, this approach to tying protects small undertakings that are more efficient at producing a particular product. By preventing dominant undertakings from excluding rivals that can only make a single product more efficiently at that point, it maintains competition in neighbouring markets, providing time for the competitors in those markets to enter the dominated market and increase competition within that market too.

7.0 Conclusion

This chapter has covered three primary issues: first, it has explained that the main guiding principle that directs the EU competition law approach between 1957 and 2004 is “customer freedom”. Second, it has been shown that the case law and decisions related to tying reflect an Ordoliberal influence on EU tying law and third it has explained how the “customer freedom” principle on which tying law is based can be supported/defended on economic grounds. As a result it has been argued that there are good grounds for the Commission and courts rejecting the views of the Chicago School when applying tying law.

7.1.The “customer freedom” approach

It has been seen that the condition of “two separate products” was never expressly a requirement to find a tie during the mono-theoretical period. Instead tying was determined by reference to “customer freedom” as a fundamental principle guiding the application of tying decisions. The way the restriction of customers’ freedom was established is expressed by the following test:

- 1) Are there consumers who wish to purchase the tying good free from the tied good;
- 2) Is it practically and commercially possible to provide the two elements separately;
- 3) Is there objective justification for the tie?

This customer freedom test, although not expressly articulated in case law in the above fashion, is a fundamental guiding test in this period of EU tying law. In later chapters it will be possible to see that this concept continues to play an integral part in tying law. Further it has been explained that the Commission and courts have given their own justifications for protecting “customer freedom” on the basis that it places the power to decide what should be sold together and what should be sold separately with the customer.

Since the customer knows their own needs best it is logical that they should be the ones to decide what products they wish to buy together and which separately and not necessarily dominant undertakings who may conceivably have alternate aims other than benefiting customers. Further where genuine efficiencies exist and these efficiencies are appropriately passed on to the customer, the customer is best placed to decide whether these benefits are sufficient to induce them to buy the two products together. The Commission and courts have also expressed that they believe that tying limits access to the market for competitors. The law on tying is also used to prevent this from happening.

This careful analysis of the case law demonstrates that key elements of Ordoliberalism implicitly underpin the decisions of the EU competition authorities in EU tying law. In addition, it is argued that there are also tacit rejections of tenets of the Chicago school that strongly suggest that this is not a key school of thought from which the Commission and courts derive inspiration.

7.2. Theoretical economic analysis

The validity of the customer choice approach has been assessed from a theoretical economic point of view. To do this the arguments of the Chicago School of thought¹²⁶ have been used to critique the customer choice approach. The purpose of this element has been to assess whether the approach used by the EU competition enforcement authorities is justified or whether it is in need of reform. It has been argued that the approach pursues the legitimate economic aims of maximising the welfare of consumers and maintaining the best competitive environment. To fail to do so could, not only cause detriment to consumers by requiring them to purchase the best bundle over all, rather than allowing them to purchase the combination that provides the greatest utility in total, but it also has the potential to exclude from the market those best placed to undermine efforts by the dominant undertaking to extract monopoly profits.

¹²⁶ In particular those criticisms based on the work of Richard Posner, see Richard A. Posner, 'The Chicago School of Antitrust Analysis' [1979] 127 U. Pa. L. Rev. 925.

In reference to the thesis as a whole this chapter has demonstrated that customer freedom, a concept highly regarded by Ordoliberal scholars, has been a fundamental concept used to analyse tying problems. It has also explained that from an economic stand point there are arguments that support this customer freedom based approach and justify its use based on maximisation of customer welfare and maximising competition in markets where competition is already weakened by the presence of a dominant undertaking.

Chapter Five

The Impact of the Microsoft (I) Judgment on EU Tying Law

1.0 Introduction

The decision of the Grand Chamber of the Court of First Instance (CFI, now General Court) in Case T-201/04 *Microsoft v. Commission* on 17 September 2007¹ has been described as “the judgement of the decade”² and the most important competition case in European history³ bringing Article 102 TFEU towards the use of greater economic based analysis. Further the judgment confirmed the Commission’s earlier 2004 *Microsoft* decision⁴ with its record breaking fine totalling €497,196,304, it also saw EU tying law being applied to the rapidly changing and complex high technology industry.⁵ The CFI judgment confirmed the Commission’s allegation that Microsoft had unlawfully tied its PC operating system (Windows) with its media player (Windows Media Player). Several years after the CFI judgment (which was not appealed to the then ECJ), the case remains the leading authority on EU tying law, but many aspects of the judgment have attracted controversy which is on-going.

In relation to the thesis as a whole this chapter argues that the Commission and CFI’s approach to tying in *Microsoft I* is consistent on the one hand with its previous case law on tying, but also contains new and important innovations. The EU approach to tying has stayed the same in that the overarching principle is to protect the freedom of the customer to choose the products that they wish to obtain and prevent dominant undertakings from interfering with this freedom of choice. Nevertheless, there are some interesting and significant changes in that both the Commission and the CFI have begun to make way for greater use of economic theory in applying the law to tying. The Commission made greater efforts to investigate the individual market in order to assess whether it was possible for the tie to effect

¹ Case T-201/04 *Microsoft v. Commission*: [2007] ECR II-3601, judgment of the Grand Chamber of the Court of First Instance of 17 September 2007

² Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 927

³ Robert Lane, 'EU Law: Competition' (2010) 59(2) *I.C.L.Q.* 489, 492

⁴ *Microsoft* (Case COMP/C-3/37.792) [2005] 4 *CMLR* 965, Article 3 of the decision

⁵ It should be noted that the fine applied to Microsoft for both infractions regarding tying and interoperability on its workgroup server software. The scope of this thesis is limited to the tying element and the interoperability element of the decision will not be discussed.

foreclosure of competitors from the market. It is argued by this author that this approach appears to follow post-Chicago thinking. As such this appears to be the beginning of the di-theoretical period, that is, the period in which both Ordoliberal aims and post-Chicago analysis start to be used concurrently by the Commission and courts in their application of tying law. Whether or not this new approach applies exclusively to the software market or to tying generally is difficult to establish because, as will be discussed in the following chapters, the only tying decisions that have taken place since *Microsoft I* relate to software. There is however one strong piece of evidence that this di-theoretical approach may be applied to 'classic' non-software markets; that is the Guidance⁶ issued by the Commission on the application of Article 102. This Guidance, along with the Commission decisions since *Microsoft I* will be explored further in Chapter Seven, where it will be demonstrated that there is further evidence to show that the Commission and courts appear to be applying post-Chicago thinking in their post-Microsoft decision making process.

This chapter will be structured in following manner: First, in order to understand how Microsoft's behaviour is alleged to have affected the market, it is important to understand how that market works. Therefore the products involved, the way these products generate revenue and the way customer uptake affects their utility to customers/consumers will be set out. It is crucial to understand these idiosyncrasies of the market involved in order to understand how Microsoft's behaviour could and was alleged to influence and affect its competitors.

Second, the legal test that was applied in both the Commission decision and the CFI judgment will be discussed and the main arguments raised by Microsoft in the Court judgment will be set out. This will show that the Commission's reasoning was strongly supported by the CFI demonstrating

⁶ Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02

that there is no noticeable division between the approach of the Commission and the Court.

Third, the novel elements that have been added to the test for tying by the Commission and confirmed by the CFI will be set out. These new elements are the addition of “separate products” and “foreclosure”. In the case of “separate products” this will be criticised as an unnecessary semantic change, and in the case of “foreclosure” this will be endorsed as a useful explicit requirement, that appears to have been implicitly assumed to exist in the cases previous to *Microsoft I*. It will also be argued that it is this additional requirement in particular which is now being used to incorporate greater use of economic theory in a post-Chicago style of economic assessment of tying effects.

Fourth, the chapter will explain that the broader theoretical basis underlying the *Microsoft I* decision is consistent with prior case law in that it also pursues the aim of maintaining ‘customer choice’. What has changed in essence is that post-Chicago economics is being used to help determine when a particular tie is likely to pose a risk, either directly or indirectly to customers’ freedom to choose a combination of products that they want.

Fifth and finally, an amended test from that given in *Microsoft I* will be provided by the author. Although the change given is subtle it is necessary in order to refocus the test upon that which tying law is seeking to protect: customer freedom.

1.1. The importance of the market in the Microsoft (I) case

From the outset, it is considered important by this author to set out the complex product, market and profit structures of Microsoft and its competitors. This information on how computer operating systems, media players, content producers, and consumers, interact is crucial in order to understand how the

Commission established Microsoft's tying behaviour was likely to affect competition in the market and hence be ruled unlawful.

1.1.1. Products

The Commission, in its decision, defines the various elements of software it considers as "system software" and "application software". System software it states "controls the hardware of the computer" sending instructions on behalf of applications that fulfil a precise need for the user. It goes on to say that operating systems (Microsoft Windows being an example) are an example of system software; software controlling the basic functions of a computer, allowing the user to run application software.⁷ Media players are "application software".⁸ Media players are defined as software products that play back audio and video content. A media player is able to "translate" digital content into instructions that are channelled to speakers or a display through an operating system.⁹

In order to distribute content such as audio and video over the internet software infrastructure is required. Different pieces of software enable media¹⁰ to be encoded, transmitted and played back by the recipient.¹¹ The media information can be encoded into different formats. The formats define how data are arranged in digital media files. As digital media involves voluminous amounts of information compression and decompression algorithms have been developed, in order to make it possible to reduce the storage space required by audio and video content. The piece of code in a media player that implements a compression/decompression algorithm is called a "codec" (coder/decoder). In order to correctly interact with media content compressed in a given format, for example playing a video file, a media player needs to implement the corresponding codec.¹² Different formats have different codecs.

⁷ Microsoft (n 4) para 37

⁸ *ibid* para 402

⁹ Microsoft (n 4) para 60

¹⁰ Such as video and audio

¹¹ Microsoft (n 4) para 112

¹² *ibid* para 61

Some of these formats are open, which means that they are free for any software company to use and incorporate into their products, and others are proprietary formats.¹³ Different pieces of software are used to (i) encode a digital product (content producer); (ii) decode it (content consumer). Windows Media Player (WMP) is the software used by the consumer to decode media data. Most software developers don't produce a complete software set for the entire process from encoding to play back by the user. The exceptions to this at the time were Microsoft, RealNetworks and Apple. Other developers who wished to use their technology to encode or decode media data would pay for a licence¹⁴ from one of these three companies or they used open industry standards.¹⁵

1.1.2. Profit and Market structure

Microsoft's client software, that is the media player in question, was installed on every computer with the Windows operating system as a non-removable component.¹⁶ It could not play either Realnetworks' format, Apple's Quicktime format or MPEG-4, an open source format.¹⁷ Microsoft's own encoding software was available through a free download.¹⁸ Its server streaming software, which only runs on Windows servers, was freely available with any version of Windows Server 2003 or as a download from Microsoft's website.¹⁹ So ostensibly, Microsoft did not make direct profit from the provision of its streaming and encoding software when customers downloaded Microsoft's own software. Although the Commission pointed out in its decision, more than once, that in reality the cost of Microsoft's media player was hidden in the price of the operating system media player bundle.²⁰ That is to say that the elements were technically tied through integration rather than being tied contractually.

¹³ *ibid* para 113

¹⁴ For example, for a software developer to incorporate Microsoft's Windows Media Video 9 formats into its software it would cost 10 US cent for a decoder and 20 cents per encoder or 25 cents for both (as of January 2003) see Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965, footnote 132.

¹⁵ Microsoft (n 4) para 117

¹⁶ Microsoft (n 4) para 310

¹⁷ *ibid* para 122

¹⁸ *ibid* para 124

¹⁹ *ibid* para 123

²⁰ *ibid* footnote 945 and 971

In contrast to this RealNetworks, Microsoft's competitor, made a substantial proportion of their revenue (39.8%) from licensing its software to consumers.²¹ This was because unlike Microsoft, RealNetworks sold two versions of its media player; one that was free and another that was a premium 'paid for' version.²² Further, while RealNetworks had a free version of its server software, its enterprise versions cost upwards from \$4,199.²³ RealNetworks had also recently developed a media player that could play Windows Media formats, but without using Microsoft's codec, meaning that RealNetworks did not have to pay a licence fee to Microsoft.²⁴

Other media players exist beyond Microsoft, Apple and RealNetworks, but they do not use their own format for encoding and decoding data. "Musicmatch" and "Winamp" for example rely on Microsoft's format. They provide only media players and do not provide software to create, manage or deliver digital content.²⁵ This means that any content provider seeking to target Musicmatch users, for example, would need to use Microsoft's software.

2.0 The Commission and CFI decision

2.1. The Commission's 2004 *Microsoft* decision: Microsoft²⁶

One of the main areas of interest within the *Microsoft I* Decision was the express formulation of a tying test. The Commission applied a four pronged test to determine that tying had occurred:²⁷

- (i) the tying and tied goods are two separate products;
- (ii) the undertaking concerned is dominant in the tying product market;

²¹ RealNetworks' revenue was generated as follows: 39.8% Software licences fees (client and server) Service revenue 56.6% (digital media subscription) 3.7% Advertising revenue. See Microsoft (n 4) para 125

²² *ibid* para 131

²³ *ibid* para 133 (price correct on 4 September 2002)

²⁴ *ibid* para 130

²⁵ Microsoft (n 4) para 141

²⁶ *ibid*

²⁷ The test did not have any case law references given to indicate from where it was drawn.

- (iii) the undertaking concerned does not give customers a choice to obtain the tying product without the tied product; and
- (iv) tying forecloses competition.²⁸

This test (“the Microsoft test”) was applied by the Commission without reference to any prior tying case law.²⁹ There were no references and the Commission did not explain how this test related to the leading cases on tying (discussed in Chapter 4) such as *Hilti*³⁰ and *Tetra Pak*.³¹ (Although the CFI did cite these cases in support of the test in its judgment.³²)

The first three elements of the Microsoft test are not complicated, that is not to say they were uncontentious, but they do not need further elaboration at this point. In contrast, how Microsoft’s behaviour was alleged to foreclose the market requires greater explanation. The Commission identified the following “feedback loop” which was used in support of both the Commission and CFI decisions. In brief it can be described as follows:

1. Content providers and software developers look to installation and usage shares of media players when deciding in which technology to develop their complementary content and software.³³
2. By tying Windows and WMP Microsoft ensures that content providers and software developers who use the Windows format can reach over 90% of the market, so they primarily code for WMP.³⁴

²⁸ Microsoft (n 4) para 794

²⁹ Pierre Larouche, 'The European Microsoft Case at the Crossroads of Competition Policy and Innovation: Comment on Ahlborn and Evans' (2008) 75 Antitrust L.J. 933, 936

³⁰ Case T-30/89 Hilti AG v Commission [1991] ECR II – 1439 and Case C-53/92 P Hilti AG v Commission [1994] ECR I – 667

³¹ Case T-83/91 Tetra Pak v Commission [1994] ECR II – 762 and Case C-333/94 P Tetra Pak v Commission [1996] ECR I – 5951

³² See Microsoft (n 1) para 859

³³ Microsoft (n 4) para 879

³⁴ *ibid* para 880; Note: once software or content is encoded in the proprietary Windows media format, it can only be played back on other media players if Microsoft licenses its technology (see paragraph 881).

3. This content drives up the popularity of the media player which, in turn, drives uptake of the underlying media technology.³⁵
4. This uptake of WMP feeds back to step one.

Through tying WMP, Microsoft was alleged to have thus created a positive feedback loop reminiscent of the one that propelled Windows to its quasi-monopoly position in the client PC operating system market.³⁶

2.2. The Court of First Instance Judgment (now General Court): T-201/04 *Microsoft v. Commission* 17 September 2007

The Commission Decision was appealed by Microsoft to the Court of First Instance which delivered its ruling on 17 September 2007.³⁷

2.2.1. The basis of Microsoft's appeal

Microsoft challenged the four part test applied by the Commission. It argued that the Commission had incorrectly applied EU law on tying,³⁸ It argued that the test³⁹ the Commission had applied departed from Article 102 (d) TFEU in two ways.⁴⁰ First, it stated that Article 102 TFEU prohibits abusive behaviour⁴¹ and that:

“Such abuse may, in particular, consist in:

(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.”

³⁵ *ibid* para 881; Underlying media technology not only includes the supported codecs but also other formats such as DRM and Microsoft's media server software

³⁶ *ibid* para 882

³⁷ The appeal procedure is dealt with by Article 263 TFEU (ex Article 230). The consequence of this is that the Court's jurisdiction allows it to check rules of procedure, assessment of facts and checking for manifest errors of assessment of misuse of power. See: T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 87

³⁸ *Microsoft* (n 1) para 840, 794

³⁹ *ibid* para 842

⁴⁰ *ibid* para 844

⁴¹ “Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.”

Microsoft claimed that Commission had replaced this requirement that of supplementary obligations that are not related to the contract with the condition that the dominant undertaking does not give customers “a choice” to purchase the tying product independent of the tied product.⁴²

Second Microsoft claimed the Commission had added a foreclosure requirement not expressly provided for in Article 102 (d) (ex 82(d)). This requirement was not normally taken into account when assessing the existence of abusive tying⁴³ (the addition of foreclosure is discussed in detail below, section 3.2).

Both of these arguments were firmly rejected by the Court as “purely semantic”.⁴⁴ The Court decided that the Commission’s analysis was correct and consistent both with Article 102 (2) (d) TFEU and with the established case-law.⁴⁵ The Court stated that the elements set out in the Microsoft test⁴⁶ were the appropriate factors to consider when seeking to ascertain whether a particular behaviour constituted abusive tying. Although the Commission itself did not make reference to the case law when it expressed the test, the Court said that it was in line with case-law and referred to specific cases in support.⁴⁷

The Court added that the list of abusive practices set out in Article 102 (2) TFEU was not exhaustive but rather illustrative of examples of abuse.⁴⁸ Therefore it was not necessary for the abuse to conform precisely to one of the examples (a) – (d) in order to be a violation of that Article 102(2) TFEU.⁴⁹

⁴² Microsoft (n 1) para 845

⁴³ It was argued that the Commission further based its conclusion on a new and highly speculative theory (see paragraph 846). Largely the same element was argued later in their plea. The Court rejected the argument for reasons that will be considered in full below as essentially Microsoft raised the same argument again in their first plea (see paragraph 868)

⁴⁴ Microsoft (n 1) para 850

⁴⁵ *ibid* para 859

⁴⁶ See above and *ibid* para 794

⁴⁷ *ibid* para 859; in particular Case T-30/89 *Hilti v Commission* [1991] ECR II-1439, upheld in Case C-53/92 P *Hilti v Commission* [1994] ECR I-667, Case T-83/91 *Tetra Pak v Commission* [1994] ECR II-755, Case C-333/94 P *Tetra Pak v Commission* [1996] ECR I-5951.

⁴⁸ Microsoft (n 1) para 860

⁴⁹ *ibid* para 861

In any event the Court decided that the test applied in the *Microsoft I* Decision reflected the conditions laid down in Article 102 (2) (d) TFEU appropriately.⁵⁰

In relation to Microsoft's first point, the CFI explained that when the Commission stated that the dominant undertaking did 'not give customers a choice to obtain the tying product without the tied product,' it was merely using different words to describe the concept that tying assumes the customers are compelled in one form or other to accept supplementary obligations.⁵¹

In relation to the second argument put forward by Microsoft, the Court stated that while it was true that neither Article 102(d) nor Article 102 as a whole contained any reference to anticompetitive effect, the principle remained that conduct was only abusive if it was capable of restricting competition.⁵²

It can be seen that the Court rejected Microsoft's arguments, and strongly endorsed the four point *Microsoft I* test that the Commission used.⁵³

2.2.2. Two further pleas

Assuming the Commission had interpreted the test to be applied appropriately Microsoft relied on two further pleas in seeking to appeal the decision. The first plea, disputed any infringement of Article 102 (ex Article 82) and second plea claimed a breach of proportionality.⁵⁴

The Court dealt with the four parts of the first plea in the order in which they arise when applying the test:

1. The existence of separate products;
2. The existence of supplementary obligations;
3. The existence of restrictions on competition;

⁵⁰ *ibid* para 862

⁵¹ *ibid* para 864

⁵² T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 867 ; See Case T-203/01 *Michelin v Commission* [2003] ECR II-4071, para 237.

⁵³ *Microsoft* (n 1) para 869

⁵⁴ *ibid* para 814

4. The existence of objective justification of Microsoft's behaviour.⁵⁵

The Court also dealt with the claim that the Commission failed to take into account the obligations imposed by the TRIPS Agreement. However this largely relates to international trade law and therefore will not be dealt with in detail here.⁵⁶

2.2.2.1. The existence of two separate products

Microsoft argued as its main point, as it did at the hearing before the Commission Decision was issued, that the *media functionality* was not a separate product from the Windows operating system but rather formed an integral part of it. As a result, it argued that there was only a single product for sale to customers which is being constantly updated.⁵⁷

They then went on to argue three further points to support this:

1. Microsoft had to tie WMP with Windows for technical reasons;
2. WMP and Windows were linked by nature and commercial usage;
3. That the commercial failure of the remedy⁵⁸ (Windows without WMP) demonstrated that the Commission's finding of separate products was incorrect.

To begin, the Court clarified that the software concerned was that for WMP, and not software that was merely related to *media functionality*. It noted that even Microsoft itself differentiated in its technical documentation between files that constitute WMP and other media files, in particular those relating to basic media infrastructure.⁵⁹

⁵⁵ *ibid* para 870 (compare 839)

⁵⁶ The Court considered Microsoft's argument and rejected it on the basis that the TRIPS agreement allows for the Member States to prevent abusive behaviour that has an adverse effect on competition. See T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 1188-1193, rejection at para 1192.

⁵⁷ *Microsoft* (n 1) para 885-912

⁵⁸ The remedy, its failure and the consequences of that failure are discussed in Chapter Six.

⁵⁹ *Microsoft* (n 1) para 916

The Court then noted that the Commission had correctly stated that the distinctness of a product was assessed by reference to customer demand.⁶⁰ Microsoft had argued that the test ought to have been whether there was demand for the tying product without the tied product. This was rejected.⁶¹

First, the CFI held that this did not correspond to what was expressed in case law.⁶² Second, Court said the argument amounted to saying that complementary products could not constitute separate products. For example, the *Hilti* case concerned nail magazines and nails. Since there would be no need for nail magazines without nails, these two products would then be categorised as a single product. But that was not the case.⁶³ Third, regardless of the previous points there was demand for Windows without WMP, for example, from companies that do not want their staff using their computers for non-work-related purposes.⁶⁴ Looking outside of the case-law to the practical facts that could support or undermine an argument for separate products, the Court also found that:

- The function of Windows and WMP was different;⁶⁵
- There were independent producers who made only media players and did not produce operating systems;⁶⁶
- Microsoft designed versions of WMP that worked with competitors' operating systems;⁶⁷
- WMP was available for download independently of Windows and released upgrades of WMP independent of Windows;⁶⁸
- Microsoft engaged in promotions specifically dedicated to WMP;⁶⁹
- Microsoft provided different licences depending on whether they related to Windows or WMP;⁷⁰

⁶⁰ *ibid* para 917

⁶¹ *ibid* para 919

⁶² *ibid* para 920

⁶³ *ibid* para 921

⁶⁴ Microsoft (n 1) para 924

⁶⁵ *ibid* para 926

⁶⁶ *ibid* para 927

⁶⁷ *ibid* para 928

⁶⁸ *ibid* para 929

⁶⁹ *ibid* para 930

- Despite the bundling, a number of customers continued to acquire media players from Microsoft's competitors, separately from the their operating system.⁷¹

2.2.2.2. Consumers are unable to choose to obtain the tying product without the tied product

Microsoft argued that they had not prevented customers from obtaining the tying product without the tied product on three bases:

1. customers paid nothing extra for receiving WMP with windows;
2. customers were not obliged to use WMP; and,
3. customers were not prevented from installing and using competitors' media players.⁷²

The Court observed that, regardless of these arguments, it was not disputed that consumers were unable to acquire the Windows system without also acquiring WMP, which means the requirement of abusive tying, that the contracts were made subject to supplementary obligations, was satisfied.⁷³ In addition, it was not possible to uninstall WMP.⁷⁴ This alone appeared enough for the Court to reject the arguments.⁷⁵ But nonetheless the Court addressed Microsoft's points stating that: while there was no separate price for WMP that did not mean it was free of charge, rather the price was just incorporated into the total price of the Windows operating system. Also there was nothing to suggest from either Article 102 or the case-law on tying that required a certain price to be paid for the tied product.⁷⁶ And with regard customers not being obliged to use WMP and not preventing users from installing other media players the Court said that neither argument was relevant since Article 102 and tying case-law did not require that to be the case.⁷⁷

⁷⁰ *ibid* para 931

⁷¹ *ibid* para 932

⁷² Microsoft (n 1) para 950-960

⁷³ *ibid* para 961

⁷⁴ *ibid* para 963

⁷⁵ *ibid* para 966

⁷⁶ *ibid* para 969

⁷⁷ *ibid* para 970

2.2.2.3. The Foreclosure of competition

Microsoft claimed that the Commission had failed to prove that integrating WMP and Windows involved foreclosure of competition.⁷⁸ In particular Microsoft criticised the Commission for applying a “highly speculative theory” relying on prospective analysis of the possible reactions of third parties in order to find that the tie would foreclose competition.⁷⁹

The Court did not accept this. It found that the Commission had “clearly demonstrated” that the pre-installation of WMP on Windows systems had “the inevitable consequence of affecting relations on the market between Microsoft, OEMs and suppliers of third party media players” altering the balance of competition in Microsoft’s favour and to the detriment of other operators.⁸⁰ The fact that the Court considered the actual effects which the tie had already had and the way that the market was likely to evolve did not mean that it had adopted a new legal theory. On the contrary, normally the Commission would have just considered that tying by its nature had a foreclosure effect.⁸¹ The Court accepted that Commission’s analysis showed that Microsoft’s conduct was “liable” to foreclose competition.⁸² The Court then went on to assess the validity of the Commission’s foreclosure explanation, but this consists of little more than repeating the exact same points and coming to the exact same conclusion as the Commission did in its own analysis.⁸³

2.2.2.4. The absence of objective justification

Within EU law it has been expressed that the dominant undertaking may provide objective justifications for their behaviour.⁸⁴ Microsoft argued that the tie produced efficiency gains that outweigh any anti-competitive effects.⁸⁵

⁷⁸ *ibid* para 989-1031

⁷⁹ *ibid* para 1032

⁸⁰ *ibid* para 1034

⁸¹ Microsoft (n 1) para 1035; This suggests that the Court considered that actually the Commission was going further above the requisite standard to show foreclosure than normal, not below it.

⁸² *ibid* para 1036

⁸³ *ibid* para 1037-1054

⁸⁴ “the Commission will also examine claims put forward by a dominant undertaking that its conduct is justified. A dominant undertaking may do so either by demonstrating that its conduct is objectively necessary or by demonstrating that its conduct produces substantial

Microsoft said that:

- the Commission ignored the benefits to software developers and website creators who benefit from a stable and well defined Windows platform;⁸⁶ and,
- that removing WMP would result in degrading and fragmenting the Windows operating system.⁸⁷

In answer to this the Court recalled once again that Microsoft was not obliged to stop providing Windows with WMP altogether, but rather to provide a version of Windows without WMP.⁸⁸

Next the Court stated that the fact that software and website developers could rely on WMP being present on almost all PCs in the world was precisely a fundamental reason why the tie was considered to lead to market foreclosure.⁸⁹ While it was accepted that standardisation⁹⁰ did present advantages, it was not for Microsoft to impose that standard unilaterally through tying.⁹¹ Further it was not requiring a removal of functionality because OEMs could provide their own media software by installing third party media players.⁹²

efficiencies which outweigh any anticompetitive effects on consumers.”; Commission, ‘Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings’ (Communication) (2009) OJ C 45/02, para 28

⁸⁵ Microsoft (n 1) para 1102-1143 and 1146-1147

⁸⁶ ibid para 1146

⁸⁷ ibid para 1147

⁸⁸ Microsoft (n 1) para 1149

⁸⁹ ibid para 1151

⁹⁰ Standardisation is also referred to as tipping. Tipping is also explained briefly in the texts of the decisions. The market for a product tips when a technology gains enough momentum (users and or software developers for example) so that the attendant network effects propel that technology, format etc to dominance. After this stage that format of technology usually becomes the de facto standard, see; Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965, para 946

⁹¹ Microsoft (n 1) para 1152

⁹² ibid para 1156

It was also established that while Microsoft claimed integration lead to superior performance⁹³ and that certain software would not work⁹⁴ or Windows would have its functioning affected⁹⁵ if WMP was removed these assertions were either unsupported or there was evidence to the contrary.⁹⁶

2.2.2.5. US v Microsoft Corp. (D.C. Cir. 2001)

Microsoft also submitted that since there had already been a case regarding Windows and WMP in the United States, and that there had been a settlement agreed, this was sufficient and it was not necessary to take the measures any further.⁹⁷ This was rejected not only due to the timing of when the abuse took place in the US decision,⁹⁸ but also the US settlement did not allow customers to acquire Windows free from WMP.⁹⁹

The United States pursued Microsoft for a similar tying offence prior to the EU litigation. The essence of this case was that Microsoft had attempted to use its power in the market for operating systems to increase take up of its Internet Explorer browser (IE).¹⁰⁰ The District Court (District of Columbia) found that tying IE with Windows “prevented OEMs from preinstalling other browsers and deterred consumers from using them”.¹⁰¹ This was because IE software was irremovable from Windows and installing another browser would entail further costs and use more space on the computer’s hard drive.¹⁰² On appeal to the Court of Appeals, the court stated that on a matter of procedure the issue should be remanded back to the District Court.¹⁰³ On remand the District Court Judge ordered settlement discussions,¹⁰⁴ which resulted in the United

⁹³ ibid para 1159

⁹⁴ ibid para 1163

⁹⁵ ibid para 1164

⁹⁶ ibid para 1165

⁹⁷ ibid para 972

⁹⁸ Microsoft (n 1) para 973

⁹⁹ ibid para 974; The US settlement merely required Microsoft to hide WMP’s presence on the system. It remained fully active and pre-installed. WMP would also reappear if the user used Internet Explorer to access media files over the Internet.⁹⁷⁴

¹⁰⁰ US v Microsoft Corp., 253 F.3d 34, 47 (D.C. Cir. 2001) 64-65

¹⁰¹ ibid 64

¹⁰² ibid

¹⁰³ ibid 84 on the basis that the application on the law on a per se basis by the lower court was “simplistic” and carried “a serious risk of harm.” The plaintiffs were to pursue their tying claim on remand under the rule of reason.

¹⁰⁴ US v Microsoft Corp., 2001 U.S. Dist Lexis 24272 *8 (D.D.C. Sept. 28, 2001).

States (as a legal body) and nine of the States (as individual legal bodies) reaching a consent decree with Microsoft.¹⁰⁵ Nine states sought further remedies but ultimately were granted only the same remedies as had been agreed previously.¹⁰⁶

With respect to tying the main element of the consent decree that applied was as follows:¹⁰⁷

- Microsoft was required to allow end users and OEMs to remove access to Microsoft Middleware Products by removing icons, shortcuts, menu entries and disabling automatic invocations;¹⁰⁸ and,
- Microsoft was required to offer the end user the opportunity to alter default invocations.¹⁰⁹

However Microsoft retained the right to program Windows to invoke a Microsoft Middleware (such as IE) in any instance in which Non-Microsoft Middleware (such as a third party browser) failed to implement a reasonable technical requirement. So if there was some sort of information that the user was trying to access that would not function properly on non-Microsoft Middleware for some technical reason (e.g., a requirement to be able to host

¹⁰⁵ 66 Fed. Reg. 59452 (Nov. 28, 2001) and after amendment: 67 Fed. Reg. 23654 (May 3, 2002). Final approved version U.S. v Microsoft Corp., 2002 WL 31654530 at *16 (D.D.C. Nov. 12, 2002). Further see: Sue Ann Mota, 'Hide It or Unbundle It: A Comparison of the Antitrust Investigations Against Microsoft in the U.S. and the E.U.' (2005) 3(2) *Pierce L. Rev.* 183

¹⁰⁶ *Mass. v Microsoft Corp.*, 373 F.3d 1205-1207, 1210.

¹⁰⁷ The main aspects of the settlement were as follows:

A. Microsoft shall not retaliate against an OEM because it is known to Microsoft that the OEM is or is contemplating making use of software that competes with Microsoft Software or shipping a Computer that includes both a Windows Operating a non-Microsoft Operating System.

B. Microsoft's provision of Windows Operating System Products to Covered OEMs shall be pursuant to uniform license agreements with uniform terms and conditions.

C. Microsoft shall not restrict by agreement any OEM licensee from installing, displaying or promoting Non-Microsoft middleware.

F. Microsoft shall not retaliate against any ISV or IHV because they are developing, using, distributing, promoting or supporting any software that competes with Microsoft Software

G. Microsoft shall not enter into any exclusively agreement or agreements that require a fixed percentage of sales.

¹⁰⁸ Automatic invocations include launching automatically at the conclusion of a boot sequence, upon connections or disconnection to the Internet etc.

¹⁰⁹ *United States v Microsoft Corp.*, Modified Final Judgement 7 September 2006, Civil Action No. 98-1232, Section H

a particular ActiveX control) then the equivalent Microsoft software would be activated by the computer.¹¹⁰

Therefore after the US case¹¹¹ against Microsoft, Microsoft still installed its media player on every computer with its operating system as a non-removable component. As a result, the Commission considered that Microsoft was required only to 'hide' the presence of the programme from users. All of the code was still present¹¹² on every installation and started if a user tried to open media encoded in Microsoft's format.¹¹³ Therefore, despite the US remedy, Microsoft's behaviour was still considered an infringement of Article 102 (d) TFEU.¹¹⁴

2.2.2.6. The second Plea

Microsoft claimed that the Commission's remedy was disproportionate. In the next chapter the merits of the remedy implemented in *Microsoft I* will be discussed, what is relevant here is that the Court rejected Microsoft's claim. Microsoft challenged the decision the basis of three grounds. But all were grounds that had been dealt with previously under the first plea but relisted under the heading of proportionality.¹¹⁵ Therefore the Court held that the arguments were unfounded on the same grounds as had been described earlier in the decision.¹¹⁶ And that contrary to Microsoft's assertion the remedy prescribed brought the abuse to an end with the minimum possible inconvenience to Microsoft.¹¹⁷

As a consequence of the above, the claims relating to the annulment of the contested decision were rejected so far as they concerned the tying of Windows and WMP.¹¹⁸

¹¹⁰ *ibid*

¹¹¹ *United States v. Microsoft Corporation* 87 F.Supp.2d 30 (D.D.C 2000), 253 F.3d 34 (D.C.Cir) (2001)

¹¹² *Microsoft* (n 4) para 798

¹¹³ *ibid* para 852

¹¹⁴ *Microsoft* (n 4) para 792

¹¹⁵ *Microsoft* (n 1) para 1207-1210

¹¹⁶ *ibid* para 1217

¹¹⁷ *ibid* para 1223

¹¹⁸ *ibid* para 1229

In summary, in almost every aspect the CFI confirmed the Commission's decision.¹¹⁹ This means two new requirements have been added to the law on tying:

1. It has established a requirement of separate products;
2. It has established a requirement of foreclosure.

These two elements of test have had a substantial impact on the law, which will be considered below.

3.0 The new elements of the tying test

3.1. The first element of the test: the need for "separate products"

The concept of "separate products" as a requirement to find tying constitutes an abuse was a new element in tying case law. Both the Commission and Court decisions in *Microsoft I* state that a prerequisite for finding a tie was that there are two separate products. This development has been particularly controversial.¹²⁰ At first glance, this requirement may be axiomatic, after all Article 102 prohibits any abuse of a dominant position which may, in particular, consist in:

"(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."

¹¹⁹ The only aspect of the Commission's decision that was successfully repealed related to an element of the remedy that required the placement of a monitoring trustee to supervise the implementation and compliance of the other remedies: Case T-201/04 *Microsoft v Commission* [2007] ECR II – 3601, para 1278- 1279

¹²⁰ F Enrique Gonz Alez Diaz, Antòn Leis Garcia, 'Tying and bundling under EU competition law: future prospects' (2007) 3 *Competition L. Int'l* 13, 13 "the existence of a separate 'tied' product market for which an autonomous demand exists ... [is] one of the most controversial issues in the tying field.

The acceptance of supplementary obligations suggests that there must be a supplementary and thus additional service or product that is being added to the original. But the Treaty never uses the term “separate products” or “separate services”. Prior to *Microsoft I*, although dominant undertakings had tried to defend their ties on the basis that they were a “system” rather than two products, the requirement of separate products was never articulated. It is argued that the use of these words in *Microsoft I*, words that notably had not been used prior to *Microsoft I*,¹²¹ was a poor decision. This is purely because it suggests that there is an objective distinction that makes single/tied product/s identifiable. Since this is not the case it causes confusion. This confusion has been exploited by those who disagree with the *Microsoft I* decision as a whole. If the original term “separate consumer demand” had been retained this would still explain when a tie exists (or to use the Commission’s phrase when there are “separate products”) but it would also highlight that there is no objective definition of what constitutes one or two products, but rather it is the customer’s desire to purchase the products independently that defines when a tie exists. Using the term “separate consumer demand” instead of “separate products” highlights, rather than hides this and therefore makes the law clearer and easier to understand. This argument is set out in greater detail below:

It should be recalled from Chapter Four, that no case from the mono-theoretical period articulated a specific step by step test for tying in the manner that was attempted in *Microsoft I* itself. If a test could be deduced from the case law of the mono-theoretical period it would conform to the following pattern:¹²²

- 4) Are there consumers who wish to purchase the tying good free from the tied good?
- 5) Is there any reason (e.g. practical or commercial) why it is not possible to provide the two elements separately?

¹²¹ Author’s emphasis.

¹²² This is of course subject to the requirement of dominance in the tying product.

- 6) Is there any objective justification as to why the two elements should not be provided separately?

Notably no reference to separate products is needed. Prior to *Microsoft I* there was never a substantial debate based on whether or not a tie consisted of separate products. This was because prior to *Microsoft I* any discussion on a particular tie before the Commission and courts was dealt with on the basis of the following simple determinants:

- 1) Is there customer demand for the elements separately?
- 2) Are the elements physically distinct?¹²³
- 3) Are their functions different?¹²⁴

If the answer to these questions was in the affirmative then there was a tie.

The reason why there was no substantial legal discussion regarding what constituted separate products prior to *Microsoft I*, was because the Commission and Courts had only dealt with cases where the factors above were relatively uncontentious. This was because the elements of the tie were always physically distinct, with clearly differing functions and differing customer demand. This made the presence of a tie appear obvious. To take the example of *Hilti*,¹²⁵ nail guns, nails and cartridges are all clearly physically separate items. They also all serve different purposes. As a result little time and consideration was needed or given to the idea of whether there were separate products.

¹²³ The simplicity of considering physically distinct products has not been ignored by commentators. See: Jorge Padilla, David S. Evans, 'Tying Under Article 82 EC and the Microsoft Decision: A Comment on Dolmans and Graf' (2004) 27 World Competition 4 503, 511; Jean-Yves Art, Gregory v.S. McCurdy, 'The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure' (2004) 25(11) E.C.L.R. 694, in this particular article the authors use the phrase "physically distinct" or "physical characteristics" no less than 5 times at 694, 697, 697, 699 and 706 giving an indication of how fundamental he believed it to be that the tied products be physically distinct.

¹²⁴ F Enrique Gonz Alez Diaz, Antòn Leis Garcia, 'Tying and bundling under EU competition law: future prospects' (2007) 3 Competition L. Int'l 13, 13

¹²⁵ Case T-30/89 Hilti AG v Commission [1991] ECR II – 1439 and Case C-53/92 P Hilti AG v Commission [1994] ECR I – 667

However in the *Microsoft I* decision, the factual context was different. The Commission and CFI were presented with a tie involving physically integrated elements, with no obvious visual distinction whatsoever. No additional CD was required to obtain WMP, no additional equipment needed to be bought. The question of whether a media player has a separate function to, or is part of an operating system is far more complicated when the very general/multipurpose nature of a computer's function is considered. Again comparing *Hilti* a nail and nail gun are for binding materials for the purpose of construction, the functions of a personal computer are as numerous as its potential users.

3.1.1. The Commission decision

The Commission stated that products that were not distinct could not be tied in a way that was contrary to Article 102.¹²⁶ Microsoft had argued that WMP was an integral part of Windows and as such was not distinct from Windows. The Commission did not believe that such an approach corresponded with the "realities of the market place".¹²⁷ The Commission went on to note that in both *Hilti* and *Tetra Pak* the dominant companies had tried to claim that their products were not distinct (even if in *Hilti* this was for the purpose of market definition).¹²⁸ It was further noted that in each of these cases the argument was rejected. This was because independent manufacturers who produced the tied product alone existed.¹²⁹ This was taken to indicate that there was separate consumer demand and as such distinct markets for the tied product.¹³⁰ It can be seen then that independent consumer demand was the essential requirement needed to prove the existence of a tie or "supplementary obligations".

3.1.2. The CFI judgment

The Court supported the Commission noting a number of facts that supported the Commission's finding of separate products, not least: The function of Windows and WMP was different;¹³¹ The existence of independent producers

¹²⁶ Microsoft (n 4) para 800

¹²⁷ *ibid* para 801

¹²⁸ Microsoft (n 4) para 801

¹²⁹ *ibid* para 804

¹³⁰ *ibid* para 802

¹³¹ Microsoft (n 1) para 926

who made only media players and did not produce operating systems;¹³² Microsoft designed versions of WMP that worked with competitors' operating systems;¹³³ WMP was available for download independently of Windows and released upgrades of WMP independent of Windows;¹³⁴ Microsoft had promotions specifically dedicated to WMP;¹³⁵ different licences existed for Windows and WMP;¹³⁶ and customers continued to acquire media players from Microsoft's competitors, separately from their operating system.¹³⁷ Again, most if not all of these elements demonstrate independent consumer demand, but instead were used to show separate products existed.

3.1.3. How "separate products" opened up the *Microsoft I* decision to criticism

The use of the term "separate products" has resulted in three criticisms of the law:

1. Separate products are sold together all the time, therefore it is not anti-competitive;
2. How products are viewed (two separate or one combined) changes between the producer, the customer and the competition authorities; and,
3. Preventing separate products from being combined in technology markets may result in the stagnation of technological development to the detriment of consumers.

It is argued below that these are not valid criticisms.

Separate products are sold together all the time and therefore such a practice is not anti-competitive. Commentators such as Schmidt, and Art and McCurdy have used the prevalence of separate products being sold together in ordinary commercial life to undermine the Commission's restriction of tying separate products. To that end, examples were given such as shoes with laces, mobile

¹³² *ibid* para 927

¹³³ *ibid* para 928

¹³⁴ *ibid* para 929

¹³⁵ *ibid* para 930

¹³⁶ *ibid* para 931

¹³⁷ *ibid* para 932

phones with cameras and music players,¹³⁸ cars with air conditioning and stereos and operating systems with browsers.¹³⁹ The difficulty with this first criticism is that it ignores the other requirements of the test. These combinations are unlikely to come under the scrutiny of the competition authorities because the undertakings offering them are unlikely to be dominant in the market and will often provide, for example, phones without cameras as well as phones with cameras. Therefore, the presence of “separate products” being sold together in ordinary commercial life is irrelevant, as the competition authorities are not interested in preventing all products from being sold together, but rather only those where the other essential conditions are present so that there exists a risk of negatively affecting competition.

The second criticism is summarised by Schmidt:

“Cases like *Hilti* and *EC Microsoft* illustrate that there can be a significant difference in how a product is perceived by the company producing the product, the consumers and the competition authorities. However, the competition rules and their case law offer limited guidance in defining a product.”¹⁴⁰

It is no doubt true that dominant undertakings may argue that their products are in fact a single system when the competition authorities believe there are two separate products being tied. This poses the question how can the law truly establish there is a tie when there are differing opinions on whether there are two products in the first place. The strength of this argument comes from the fact that the term ‘separate products’ implies that there is some objective difference between products that allows competition authorities to identify

¹³⁸ Jean-Yves Art, Gregory v.S. McCurdy, ‘The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure’ [2004] 25(11) E.C.L.R. 694, 698

¹³⁹ Hedvig Schmidt, ‘Article 82: is technological integration checkmated?’ [2009] 4 J.B.L. 354, 355

¹⁴⁰ *ibid* 368; this criticism has also been taking place in a more general tying context in the United States, see H. Hovenkamp, *Federal Antitrust Policy: The Law of Competition and its practice* (3rd edn., Thomson/West, 2005), 399

when there are two products being sold together, when of course this is not the case. But this issue is resolved by looking at how the competition authorities actually establish that there are two separate products.

In both *Microsoft I* and *Tetra Pak*¹⁴¹ the issue of whether there was one product or two was resolved by using patterns of supply and demand immediately prior to the tie to ascertain customer demand. This is the main determinative factor because customer demand demonstrates how customers want to purchase the product/products when given the freedom to choose. If there are undertakings offering products separately or if there are undertakings that offer only the tied product this shows there is customer demand for buying them separately. If there was no customer demand such undertakings would not be able to sustain a market presence. Therefore customer demand is the factor that determines¹⁴² that there are separate products and therefore it is not the dominant undertaking or the competition enforcement authorities who define what constitutes one product and what constitutes two, but the customer, as set out in Chapter Four, this is because the customer knows their needs better than the dominant undertaking and the competition enforcement authorities.

The difficulty created by using the term “separate products” instead of “independent/separate customer demand” is that the underlying reasoning, as set out above, becomes less clear. It obscures from the true value that the Commission and Court protects, that is customer freedom.¹⁴³ While both the Commission and Court used the term “separate consumer demand” at times in their decisions they used it infrequently and only in the context of seeking to

¹⁴¹ *Tetra Pak II* (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 118

¹⁴² There were in addition to “customer demand” a number of other factors taken into account when establishing that Windows and WMP were separate products: WMP was available on other Operating systems apart from Windows (805); Microsoft issued upgrades for WMP independently to Windows (805); Microsoft promoted WMP independently of Windows (810); Microsoft’s own documentation referred to WMP as a standalone technology (810); Operating systems and streaming media players have different functionality (811)

¹⁴³ As argued in Chapter 5.

find “separate products”.¹⁴⁴ This is an error. By not making it absolutely clear that it is the customer (through customer demand) that defines separate products the Commission opened itself up to misguided criticism about how difficult it is to determine what are separate products. The criticism is almost entirely semantic,¹⁴⁵ whether it is easier to say “independent customer demand” or “separate products”, which is established by independent demand is a matter of opinion. Nonetheless, this change in wording caused the decision to appear weaker than it actually was. This criticism could have been averted simply by making the test clearer by using the term “independent/separate customer demand” instead.

It is likely that the reason why the term “separate products” was used instead of independent customer demand is because the Commission used more than just customer demand to demonstrate that Windows and WMP were separate products.¹⁴⁶ “Separate products” may have been a term that was given to encompass both customer demand and other factors that were considered such as Microsoft providing different licences depending on whether they related to Windows or WMP. Nonetheless, the use of this term still allowed commentators to criticise the test used in *Microsoft I*. It is argued the use of the term independent customer demand instead of separate products would have made the test clearer in its application and aim of protecting the customers’ freedom to select the products most efficient for them.

The third and final criticism revolving around the separate products definition is based on the idea that preventing separate products being combined in technology markets may result in the stagnation of technological development to the detriment of consumers. If two products are increasingly being sold as a package, at what point do those two products become accepted as one product? This argument, unlike those above, may appear particularly

¹⁴⁴ The Commission uses the phrase only twice Commission Decision Case COMP/C-3/37.792 Microsoft, para 802, 804; and the Court three times T-201/04, Microsoft v Commission [2007] ECR II-3601, para 873, 901, 925

¹⁴⁵ The Court itself highlighted the “purely semantic” nature of some of Microsoft’s arguments, see Microsoft (n 1) para 850

¹⁴⁶ See Supra 142

convincing when considering rapidly changing software markets, although it could equally be applied to other less dynamic markets. The Commission was criticised, again by Schmidt, for applying an overly restrictive test that does not take into account the continuous product development and integration in “high technology” markets like operating systems.¹⁴⁷ Schmidt criticised the test saying that it may find products are tied during a transition period between when customers want products separately and the point where they expect the two elements together.¹⁴⁸

Once again this issue disappears by looking at separate products as a question of customer demand. By looking at customer demand to ascertain which products the customer wants to purchase independently it is not the Commission or Court that decides when two products are no longer separate, nor dominant undertakings, *but rather it is the customers who decide when they wish or wish not to obtain elements of a tie separately*. This is particularly important when the undertaking involved is dominant and therefore may be using the tie for motives other than purely reflecting consumer demand. For example, even though it was argued that customers did not want to buy an OS without a media player at the time Microsoft started tying, the fact was that after four years of tying by Microsoft, consumer demand for independent media players was still present.¹⁴⁹ Customers therefore did not consider the media player as part of the operating system. Therefore, either Microsoft had misread the market or their behaviour was not based on the genuine belief that there would not be demand for independent media players in future.¹⁵⁰

As a consequence of all this it can be seen that the use of the term “separate products”, distracts attention away from the genuine concern of tying law;¹⁵¹

¹⁴⁷ Schmidt (n 138) 355; Jean-Yves Art, Gregory v.S. McCurdy, ‘The European Commission’s media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure’ [2004] 25(11) E.C.L.R. 694, 697

¹⁴⁸ Schmidt (n 138) 368-369, 371

¹⁴⁹ Microsoft (n 4) para 808

¹⁵⁰ The argument that there was demand for additional independent media players but no demand for operating systems without media players is a separate argument. It will be considered below.

¹⁵¹ This issue in theory applies equally to tying in non-software markets as in software markets, but in reality it will be a source of far greater confusion in software markets due to

that is the primacy of the consumers' freedom to choose the combination of products/services they want, and instead opens up discussion on when the dominant undertaking considers there to be two products or one. It is also argued that consumer demand is important in terms of continuous product development because it ensures that the dominant undertakings have to follow the behaviour of customers (the undertaking only stops making products available separately when customers stop buying them separately) rather than dominant undertakings trying to anticipate customer trends before they happen or using such anticipation as a pretext for restricting customer choice.

It is worth noting at this point that the issue of separate products has also arisen in the context of tying under US antitrust law. Unlike EU law however the issue of separate products has been subject to debate for a number of decades, both in terms of discussion within the courts and academic debate.¹⁵² The first case where issues arose regarding "separate products" concerned advertising space sold in morning and evening local newspapers. Whether they were separate or not was dealt with on the basis of whether there were separate markets and whether the buyers perceived the two groups of readers as anything other than "fungible customer potential".¹⁵³ On this basis there was no tie. In *Crawford Transport Co. v. Chrysler Corp.*¹⁵⁴ contractual provisions allowing Chrysler to choose the carriers that shipped its vehicles to its dealers was challenged. This challenge was rejected on the basis that it was "vital" for Chrysler to have vehicles delivered properly and that to say it was enforcing an illegal right seemed contrary to "universal business practice". In *Jerrold Electronics Corp.* the court considered the mandatory purchase of an entire system and service contract was not tying separate products if there were "legitimate reasons" for selling normally

the almost total absence of observable physical distinction between integrated software programmes and software where integration has not taken place. In spite of this it is still maintained that the law is clearer, even in non-software markets, if the term "separate consumer demand" is used in place of "separate products".

¹⁵² See for an analysis of the courts' judgments: John Lahey, 'Tying arrangements and the single product issue' (1970) 31 Ohio State Law Journal 861

¹⁵³ *Times-Picayune Publishing Co. v. United States*, 345 U.S. 594, 614 (1952)

¹⁵⁴ *Crawford Transport Co. v. Chrysler Corp.* 235 F. Supp. 751 (E.D. Ky. 1962), *aff'd*, 338 F.2d 934 (6 Cir. 1964), *cert. denied*, 380 U.S. 954 (1965)

separate elements combined.¹⁵⁵ So until this point it is possible to see that the issue of separate products was dealt with on an inconsistent basis. However, since then the law has been settled through the decision in *Jefferson Parish Hospital*.¹⁵⁶ In this case it was set out that services were separate when they could be offered separately and if offered separately some customers would purchase an alternative service. This of course is similar to the current EU test as it uses customer demand to ascertain what the customer would choose to do given the freedom to do so. Weinstein has argued that the US approach in technology cases could be improved by taking into account more factors.¹⁵⁷ These factors include the customer's point of view, the manufacturers' point of view and functionality.¹⁵⁸ However, these three issues he respectively identifies using customer demand, patterns of manufacturer supply and evidence of a substantial technological advance. With regards to these matters however EU tying law already takes into account supply and demand patterns, and technological advances, if they exist, can be raised as objective justifications. So these factors are already taken into account in EU Commission and court decisions.

3.2.The fourth step of the test: Foreclosure

The fourth condition of the test in *Microsoft I* requires that the tie causes foreclosure.¹⁵⁹ Prior to the *Microsoft I* decision, foreclosure was an implied requirement.¹⁶⁰ It is argued by this author that its express inclusion in the test is a significant development as it paves the way for greater use of economic theories of exclusion and foreclosure to be taken into account.

¹⁵⁵ *Jerrold Electronics Corp.* 187 F.Supp. 545 (E.D. Pa. 1960), aff'd per curiam, 365 U.S. 567 (1961).

¹⁵⁶ *Jefferson Parish Hospital Dist. No. 2 v. Hyde*, 466 U.S. 2 (1984)

¹⁵⁷ Samuel N. Weinstein, 'Bundles of Trouble: The possibilities for a new separate-product test in technology tying cases' (2002) 90 *California Law Review* 903

¹⁵⁸ *ibid* 950-954

¹⁵⁹ *Microsoft* (n 4) para 794

¹⁶⁰ This is discussed below

3.2.1. Foreclosure prior to *Microsoft I*

As discussed in Chapter 4, prior to the *Microsoft I* case there had been little express economic analysis included in Commission and Court decisions leading some to criticise the Commission for a lack of economic rigor.¹⁶¹ This changed with *Microsoft I* because foreclosure of the market was expressly required. As noted in the previous chapter, the Court and Commission had demonstrated a concern for “foreclosure” prior to *Microsoft I*, albeit under the heading of “market access”. In the *Hilti* decision, behaviour that allowed the undertaking to prevent the entry of competitors into the market through the misuse of dominance was seen unfavourably by the EU competition authorities. The Commission stated that *Hilti* had abused the market by attempting to “limit the entry of independent producers”¹⁶² into the market. It was also said that aspects of Hilti’s commercial behaviour were “designed” for that purpose¹⁶³ stating that their policy was to “hinder new entrants” by obstructing access to the tying product needed to make use of the tied product.¹⁶⁴ In addition, Advocate General Ruiz-Jarabo Colomer noted in his opinion in *Tetra Pak* that the Court had held one of the reasons for the behaviour being considered abusive was because it limited access to the market by other producers.¹⁶⁵ Other Commission decisions also emphasised the need to protect small competitors from behaviour designed to: exclude competitors from the market;¹⁶⁶ protecting “equality of opportunity” particularly for “new market entrants”;¹⁶⁷ and other similar concepts.¹⁶⁸ This suggests that while there was no express requirement of foreclosure prior to *Microsoft I*

¹⁶¹ See Liza Lovdahl Gormsen, Why the European Commission's enforcement priorities on article 82 EC should be withdrawn (2010) 31(2) E.C.L.R. 45, 45; J. Ratliff, “Abuse of Dominant Position and Pricing Practices--A Practitioner's Viewpoint”; D. Ridyard, “Article 82 Price Abuses--Towards a More Economic Approach” in C.D. Ehlermann and I. Atanasiu (eds), *European Competition Law Annual--What is an Abuse of a Dominant Position?* (Oxford: Hart Publishing, 2006); D. Waelbroeck, “Michelin II: A Per Se Rule against Rebates by Dominant Companies?” (2005) 1(1) *Journal of Competition Law & Economics* 149, 151; Valentine Korah, ‘The paucity of economic analysis in the EEC decisions on competition Tetra Pak II’ [1993] 46 *Current Legal Problems* 148

¹⁶² *Eurofix-Bauco v Hilti* (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19, para 74

¹⁶³ *ibid*

¹⁶⁴ *ibid* para 74 see also para 98.

¹⁶⁵ The other reason will be covered elsewhere.

¹⁶⁶ *Van den Bergh Foods Limited* (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1, para 262

¹⁶⁷ *DSD* (Case COMP D3/34493) Commission Decision 2001/463/EC [2001] OJ L 166/1, para 114

¹⁶⁸ These are discussed in Chapter 5 under the heading “Preventing entry”

there was still a concern whether or not the actions of the dominant firm would have the effect of excluding competitors unfairly.

The strongest example of the Commission and courts considering potential effects similar to ‘foreclosure’ before *Microsoft I* are found in *Tetra Pak*. In the Commission decision, Tetra Pak was described as limiting “competition to the area most favourable to it”.¹⁶⁹ There was in *Tetra Pak* a requirement that all maintenance and repair of its machines be carried out by Tetra Pak. The Commission said that this “closes the door to any competitor on the maintenance and repair services market”.¹⁷⁰ This appears to correspond to stating that there is foreclosure of the maintenance and repair market. Tetra Pak also contained a provision whereby all cartons used by a purchaser of Tetra Pak machines must be supplied by Tetra Pak. The Commission stated that:

“Such a system of tied sales...makes the carton market completely dependent on the equipment market and favours the charging of discriminatory prices or indeed loss-making operations on the latter market. ... They place competitors, and chiefly those which market only one or other of the products which are tied by Tetra Pak, and who cannot therefore, unlike Tetra Pak itself, subsidize possible losses on a given product through profits made on another product, in an extremely uncomfortable position.”¹⁷¹

Further analysis continued:

“[By tying carton sales to machine sales] Tetra Pak thereby limits competition to the area which is most favourable to it, i.e. that of machines, where the technological entry barriers are very high, especially on the aseptic market, where it enjoys a virtual monopoly. By the same token, these same contractual clauses prevent the

¹⁶⁹ Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 120

¹⁷⁰ *ibid* para 108

¹⁷¹ Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1, para 117

emergence of any competition in the cartons sector, where the technological barriers are much lower.”¹⁷²

Therefore, it can be seen that the Commission has previously considered foreclosure pre-*Microsoft I* and to a very limited extent there was even some discussion regarding the economic impact of their tying obligations. But these are quite limited in their scope and are not considered in detail.

3.2.2. Foreclosure in *Microsoft I*

The express inclusion of a requirement of foreclosure should be seen positively. As discussed above foreclosure was considered occasionally in the pre-*Microsoft I* case law, but it was not analysed in detail.¹⁷³ Jones and Sufrin state that the Commission found abuse after “very little analysis of the market”.¹⁷⁴ As a consequence, the Commission was considered to lack economic consideration and analysis in its approach to abuse cases¹⁷⁵ and castigated it as being “largely ... immune to influence from economics”¹⁷⁶. As a result some suggested that a more economic approach should be taken.¹⁷⁷ The express requirement of foreclosure appears then to be a very welcome addition.

The Commission appears make a real effort to demonstrate that it did not assume foreclosure, expressly stating that since users could obtain third party media players from the internet free that there were “indeed good reasons not to assume without further analysis that tying WMP constitutes conduct which

¹⁷² *ibid* para 120, see also para 146

¹⁷³ See also: Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 904-905

¹⁷⁴ Alison Jones, Brenda Sufrin, *EC Competition Law* (3rd edn., OUP, 2008), 518

¹⁷⁵ See Liza Lovdahl Gormsen, *Why the European Commission's enforcement priorities on article 82 EC should be withdrawn* (2010) 31(2) *E.C.L.R.* 45, 45; J. Ratliff, “Abuse of Dominant Position and Pricing Practices--A Practitioner's Viewpoint”; D. Ridyard, “Article 82 Price Abuses--Towards a More Economic Approach” in C.D. Ehlermann and I. Atanasiu (eds), *European Competition Law Annual--What is an Abuse of a Dominant Position?* (Oxford: Hart Publishing, 2006); D. Waelbroeck, “Michelin II: A Per Se Rule against Rebates by Dominant Companies?” (2005) 1(1) *Journal of Competition Law & Economics* 149, 151.

¹⁷⁶ Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 904-905

¹⁷⁷ Report by the Economic Advisory Group on Competition Policy: “An economic approach to Article 82” (July 2005)

by its very nature is liable to foreclose competition.¹⁷⁸ Elements of this change opened up the Commission to criticism too. In this instance, it was not the poor wording of the test that opened the opportunity for criticism but rather Art and McCurdy¹⁷⁹ and Petit and Neyrinck¹⁸⁰ appear to take the economic arguments of the Commission out of context. They even go so far as to argue that the *Microsoft I* decision was not a real tying case at all; instead it was a case that ought to have been dealt with on the basis of essential facilities or refusal to deal.¹⁸¹ Further they also suggested that if the case was appropriately dealt with under refusal to supply then the case would have failed because the standard required would have been much higher than for tying.¹⁸² It is submitted that this view is incorrect. It is accepted that if one were to be directed to particular paragraphs of the *Microsoft I* Commission decision in isolation, for example, paragraphs 861, 866 and 878, it would appear that the *Microsoft I* decision was about access to “essential facilities”, but this is not the case. The paragraphs mentioned continually compare Microsoft’s distribution model with that of its competitors and find that their competitors’ are not equal. Art and McCurdy cited this discussion as evidence that the Commission was concerned with access to Microsoft’s operating system as a method of distribution.¹⁸³ But these paragraphs in the Commission decision are not discussing an independent issue it is merely part of the process of proving foreclosure. It is one of a number of steps taken by the Commission to ascertain whether or not Microsoft’s competitors would be able to overcome the foreclosure effect of Microsoft’s tie by making their media players just as prevalent as WMP. It is not about access to essential facilities, rather just a single step in a discussion that is seeking to establish whether Microsoft’s behaviour would foreclose the market.

¹⁷⁸ Commission Decision Case COMP/C-3/37.792 Microsoft, para 841

¹⁷⁹ Art (n 137)

¹⁸⁰ Nicolas Petit, Norman Neyrinck, 'Back to Microsoft I and II: Tying and the Art of Secret Magic' (2011) 2(2) J.E.C.L. & Pract.117

¹⁸¹ Art (n 137) 696; Nicolas Petit, Norman Neyrinck, 'Back to Microsoft I and II: Tying and the Art of Secret Magic' (2011) 2(2) J.E.C.L. & Pract.117

¹⁸² *ibid* 705

¹⁸³ Jean-Yves Art, Gregory v.S. McCurdy, 'The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure' (2004) 25(11) E.C.L.R. 694, 696; Nicolas Petit, Norman Neyrinck, 'Back to Microsoft I and II: Tying and the Art of Secret Magic' (2011) 2(2) J.E.C.L. & Pract.117

In seeking to comprehensively demonstrate that there was an economic theory underpinning the case, the Commission sought to demonstrate that by tying WMP to Windows, Microsoft could credibly start a feedback loop¹⁸⁴ that would eventually result in Microsoft's dominance in the media player market almost independent of the quality of its media player.¹⁸⁵ As such the Commission set out that:

- 1) Microsoft's behaviour would result in WMP being present on almost every personal computer;¹⁸⁶
- 2) That this ubiquitous presence would act as an incentive for content producers to code their audio and film only in Microsoft's proprietary format;¹⁸⁷
- 3) That this move towards content producers coding their content in one single format would then result in consumers moving to WMP;¹⁸⁸
- 4) That the move towards customers using WMP instead of other media players would damage competition from the market;¹⁸⁹ and,
- 5) Consequently control over Windows proprietary format would act as a serious barrier to entry to any new entrants to the media player market even if their media player was technologically superior.¹⁹⁰

Therefore, the reason why the ability of Microsoft's competitors to distribute their Media Players as effectively as Microsoft was relevant was because if Microsoft's competitors could successfully make their Media Players equally as prevalent as Microsoft's then this would undermine the process of foreclosure. This is because there would be no greater incentive for content producers to code their content in WMP than there would be to code it for any other media player, despite Microsoft's decision to tie.

¹⁸⁴ See above for the Commission's explanation of how the feedback loop operated.

¹⁸⁵ Microsoft (n 4) para 882

¹⁸⁶ *ibid* para 844

¹⁸⁷ *ibid* para 842, 889

¹⁸⁸ Microsoft (n 4) para 881

¹⁸⁹ *ibid* para 953

¹⁹⁰ *ibid* para 889

This discussion was important for the Commission to consider because Microsoft had suggested that although they were able to secure the presence of WMP on every computer that was using Windows there were other matters to take into account that showed that there may be no negative effect on competition. One of these matters was that there were other ways for users to get media players on their computers.¹⁹¹ As such, to calculate whether these other methods of getting media players to consumers were sufficient to prevent Microsoft's tie from foreclosing competition the Commission investigated whether or not they could achieve a comparable level of presence in the market place, thereby preventing Microsoft's WMP becoming the automatic choice for content providers. This required the Commission to ascertain whether internet downloading was a roughly equally efficient method of reaching customers as Microsoft's tie.¹⁹²

The evaluation of distribution methods appears to have led Art and McCurdy to mistakenly believe the Commission considered access to Microsoft's operating system distribution network to be the hindrance to competition.¹⁹³

This is not supported by the wording of the decision however:

“[841] There are indeed circumstances relating to the tying of WMP which warrant a closer examination ... in the case at issue, users can and do to a certain extent obtain third party media players through the Internet, sometimes for free. There are therefore indeed good reasons not to assume without further analysis that tying WMP constitutes conduct which by its very nature is liable to foreclose competition.”

“[842] In the following sections, it will be explained why tying in this specific case has the potential to foreclose competition so that the

¹⁹¹ *ibid* para 840

¹⁹² *ibid* para 859, see also 849 in reference to OEM distribution agreements.

¹⁹³ Art (n 137) 696: “the Commission's decision reveals that the Commission's core concern is competitive access to the OEM distribution channel which Microsoft, according to the Commission, “obviously controls”

maintenance of an effective competition structure is put at risk.”¹⁹⁴
(Note that the discussion of distribution methods followed).

So, once the discussion is placed in context, it is clear that the discussion of distribution mechanisms is there simply to evaluate whether Microsoft’s competitors were able to gain equal distribution through internet downloads or other distribution methods which would allow them to nullify any foreclosing effect of Microsoft’s tie. The Commission was not seeking to punish Microsoft for its ability to distribute its media player more effectively than anyone else, or excluding others from accessing its distribution system. Rather the evaluation of the possible avenues of distribution available to Microsoft’s competitors was just one step in the process of demonstrating the potential for foreclosure.

When the Commission’s evidence of foreclosure was evaluated by the Court its analysis was concise. The Court stated that Microsoft had merely asserted that the finding of foreclosure was based on conjecture and had not succeeded in showing that was the case. While this does not add much to the discussion of foreclosure specifically in *Microsoft I*, it is very important more generally. The Court’s response suggests that it would be willing to consider economic arguments that undermine or empirically demonstrate that the Commission’s arguments on foreclosure are conceptually or empirically flawed.¹⁹⁵ This again opens the way for far greater use of economic theory and the use of empirical economic evidence in the analysis of tying. That said, how far the court will be willing to go to analyse large volumes of complicated economic data is yet to be seen.

3.2.3. Foreclosure and the Post Chicago Approach

It is argued in this thesis that the *Microsoft I* case not only contained an express requirement of foreclosure of the market, but further contained greater economic evaluation of the effect of the tying behaviour. The Commission specifically analysed whether or not Microsoft’s behaviour

¹⁹⁴ Microsoft (n 4) para 842

¹⁹⁵ Microsoft (n 1) para 1058

foreclosed or “harmed” competition.¹⁹⁶ It noted that while in previous cases, the Commission and courts considered the foreclosure effect to be demonstrated by the tying of one product to another dominant product, in this instance there were “good reasons not to assume without further analysis that tying ... foreclose[s] competition”.¹⁹⁷ It then went on to describe the feedback loop that has already been described in this chapter.

This approach appears to conform to a post-Chicago approach. The Chicago School tends to look at cases through price theory and come to general conclusions.¹⁹⁸ Post-Chicago analysis tends to analyse competition problems by considering the individual circumstances of the case, the facts that surround that case and the differing elements of that specific market that affect the actions of the market actors.¹⁹⁹ The analysis of *Microsoft I* included looking at the way in which “network effects”²⁰⁰ affected the decision making process of content and application producers. The foreclosure loop itself is based upon the reactions of market actors, such as content producers, to the actions of other market actors. So, for example, the Commission anticipated that with the tie in place media content producers would not code their content on the basis of the most superior media software available, but rather they would chose WMP on the basis that the vast majority of consumers were likely to purchase Microsoft’s operating system and therefore they would have WMP present on their computers. It is argued that this consideration of the

¹⁹⁶ Microsoft (n 4) para 835

¹⁹⁷ *ibid* para 841

¹⁹⁸ Richard A. Posner, *The Chicago School of Antitrust Analysis* (1979) 127 U.Pa.L.Rev 925, 926; Jean W. Burns, *Challenging the Chicago School on Vertical Restraints* (2006) Utah L. Rev. 913, 913, here Burns describes how Chicago School principles gave clear, logical answers to questions that the US judiciary had found confusing for some time.

¹⁹⁹ Herbert Hovenkamp, ‘Post-Chicago Antitrust: A review and critique’ [2001] 2 Colum.Bus.L.Rev. 257, 270

²⁰⁰ What the Commission and Court mean by network effects is defined in the decision itself: “A product market is said to exhibit network effects when the overall utility derived by consumers who use the product in question is dependent not only on their private use of the product, but also on the number of other consumers who use the product. Such a network effect is a direct network effect. An indirect network effect occurs when the value of a good to a user increases as the number and variety of complementary products increase.” Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965, para 420 footnote 536. So for example, a direct network effect may be exhibited in relation to camera phones. If one person has a camera phone, then they can take pictures, but the more people who buy them, the more people to whom they can send images. In direct effects could be illustrated by a computer games console. The more games that are written to function on that console, the greater the variety of games that an owner can purchase and thus the greater utility to that user.

particular characteristics of the market combined with the analysis of the likely decisions of market actors in light of other market actors' behaviour reflects a post-Chicago approach to assessing the impact Microsoft's tie was going to have on the development of the media player market. This argument will be further supported and developed in Chapter Seven where it will be shown that the Commission, in particular, has continued to take on post-Chicago analysis in its assessment of the foreclosure caused by tying.

4.0 Customer freedom

4.1. Customer freedom in Microsoft I

It has been argued above that the approach to foreclosure in *Microsoft I* appears to follow a post-Chicago style of analysis. What will be established here is that whilst the approach to foreclosure changed, following a more post-Chicago style of analysis the overarching Ordoliberal aim of protecting customer freedom remained the same.

The Ordoliberal concern for *customers' freedom of choice* can be seen in both the Commission decision and the CFI judgment. To demonstrate this, the emphasis placed on customer freedom in the Commission decision and the Court decision will be analysed:

4.2. The Commission Decision (2004)

Beginning with the Commission decision, one of the main elements they sought to prove to establish tying had taken place was that "the undertaking concerned [did] not give customers a *choice* to obtain the tying product without the tied product"²⁰¹ Also when the Commission considered whether the fact that Microsoft's competitors also sold their operating systems with media players constituted potential tying, it found that this was not the case for a number of reasons, one of which was that Microsoft's competitor's gave users a "*choice* to remove the media player code" from the computers.²⁰² Again the fundamental concern with choice arose when the Commission

²⁰¹ Microsoft (n 4) para 794

²⁰² *ibid* para 822

considered whether or not the US judgment was satisfactory in addressing their concerns. The Commission said that the US settlement was insufficient because it did “not restore the *choice of Microsoft’s customers* as to whether to acquire Windows without WMP”²⁰³ making it clear that the customers’ freedom of choice is the pre-eminent concern of the Commission. It even appears at one point that the Commission entered into a very brief analysis of the importance of efficiency gains versus consumer choice. This occurred when Microsoft suggests that tying WMP with Windows was efficient because it saved having to distribute two products. The Commission responded by saying that such efficiency gains could not outweigh the negative effective of the tie because:

“distribution costs in software licensing are insignificant; a copy of a software programme can be duplicated and distributed at no substantial effort. In contrast, *the importance of consumer choice* and innovation regarding applications such as media players is high”²⁰⁴

This shows once again the weight of importance the Commission attaches to customer choice. Finally, the Commission’s choice of wording to describe their remedy also demonstrated where its concern lay: After ensuring that Microsoft would offer a version of Windows without WMP it also required that “Microsoft must not ... remove or restrict OEMs’ or users’ *freedom to choose* the version of Windows without WMP”²⁰⁵

4.3. The Court decision

First the Court notes that the phrase used by the Commission; “*does not give customers a choice* to obtain the tying product without the tied product” is merely another way of saying that “consumers are compelled, directly or indirectly, to accept supplementary obligations”. This suggests that the Court equates the wording of Article 102(d) with a restriction of customers’ freedom to obtain elements of a tie separately.²⁰⁶ Further when the Court was

²⁰³ *ibid* para 828

²⁰⁴ *ibid* para 958

²⁰⁵ Microsoft (n 4) para 1013 (iii)

²⁰⁶ Microsoft (n 1) para 864

explaining that the contested decision did not require users to accept operating systems without Media players, the Court observed that OEMs and users would install media players themselves (in the absence of Microsoft doing so) “the difference being that that player would not necessarily be Windows Media Player”.²⁰⁷ This once again shows that the aim of the Court decision was not to decide how customers should buy or use Windows or enter into some sort of product redesign, but rather, to simply allow users the choice of which media player they wished to have pre-installed.²⁰⁸ In addition, the Court stated categorically that the price of the tied item was not determinative of whether a tie existed. Rather “[c]oercion exists when a dominant undertaking deprives its customers of the realistic *choice* of buying the tying product without the tied product”²⁰⁹ again noting that it is the erosion of the customer’s choice, not the way in which the tie is priced that matters.

Further, the Court made clear its concern, not just for the freedom of consumers, but the freedom of third parties, such as content providers. The Court noted that “it is beyond dispute that Microsoft does not give customers the *choice* to acquire Windows without [WMP]” and that “the tying at issue has a direct influence on third parties and therefore interferes with their free choice”.²¹⁰ This is because:

“Microsoft recognises that content providers take [the wide spread distribution of a media player] into consideration when choosing the encoding format of their products and therefore implicitly accepts that the 'unmatched ubiquity achieved through [its] tie *distorts that choice*’”²¹¹

This demonstrates that the Court is also concerned about dominant market actors using their market power in order to distort the choice of third parties, who in this case are content producers of streamed media. Finally, the Court

²⁰⁷ *ibid* para 923

²⁰⁸ *ibid* para 923

²⁰⁹ *ibid* para 955

²¹⁰ Microsoft (n 1) para 1013

²¹¹ *ibid* para 1017

also defended the remedy imposed by the Commission on the basis that it “allows consumers to exercise their *choice* on the basis of the merits of the products”.²¹² This demonstrates that the consistent concern of both the Commission and the Court throughout the *Microsoft I* case was to ensure that customers were able to exercise their economic freedom to choose the combination of products they wanted on the merits of those products rather than some other quality related to Microsoft’s dominance in the market. This is in accordance with prior tying case law and Ordoliberal principles.

5.0 Improving the *Microsoft I* test

The discussion above shows that the Commission and CFI have applied the law regarding tying in a manner which is in principle consistent with previous case law. Those changes that were made were either semantic changes (changing the test from separate consumer demand to separate products) that were unnecessary or were changes that brought in the greater opportunity to use economic analysis when considering the impact of the tie (foreclosure). As such the test, whilst changing the approach by making greater use of economics to find when a tie exists, does not change in substance, the aim of tying law; seeking to maintain customer freedom.

Nevertheless, it is submitted that an amendment should be made to improve the legal test for tying further in terms of legal certainty and semantic clarity. The first stage of the test should be amended so that the tying test reads:

- (i) *the tied good is subject to independent consumer demand;*
- (ii) the undertaking concerned is dominant in the tying product market;
- (iii) the undertaking concerned does not give customers a choice to obtain the tying product without the tied product; and
- (iv) the tie forecloses competition.

This would retain the beneficial fourth stage of the test while altering the first stage so that it expressly requires independent customer demand and thereby

²¹² *ibid* para 1143

highlights the aim that the law is actually seeking to achieve: protecting the customer's freedom to purchase the products they desire.

6.0 Conclusion

This chapter has established that the Microsoft test changed the law on tying in two ways. The first was the exchange of “independent customer demand” with the phrase “separate products”. While the latter term allows the Commission to take a greater number of factors into account, it has been argued that it is a poor phrase to use because it suggests that there are objectively observable characteristics that make products separate, when what is actually key is to establish whether there are customers²¹³ who want to purchase the products separately. Establishing customer demand is important because if it exists, then in the absence of practical reasons why it is not possible, or objective justification why they should not be offered independently, the dominant undertaking should provide the products separately, rather than seek to restrict the freedom of its customers.

The second way in which the law on tying was changed was that it has now added the express requirement of establishing foreclosure. This is significant as it allows the Commission and courts to introduce greater economic analysis into their assessment of tying. It means that the competition enforcement authorities can, instead of assuming that tying will foreclose a market, set out the specific way in which they believe that the dominant undertaking’s tie will damage competition in the market place or why they believe this is not the case. In support of this they can rely upon economic models and market specific assessment in a manner that reflects a post-Chicago style of analysis.

This chapter has established that *Microsoft I* was a major change in the way the Commission and courts approach tying. While previously tying law was determined by reference only to Ordoliberal principles (thus the mono-theoretical period) *Microsoft I* marks the beginning of the di-theoretical period. That is the period in which the Commission and courts pursue the Ordoliberal aim of customer freedom, but use an economic style of assessment that

²¹³ A not insignificant number of customers

follows post-Chicago analysis. This development means that cases from this point on wards are likely to contain far greater use of economic models and far greater use of empirical economic data in order to establish what precise effect a tie is going to have on a market. This will include looking not just at the direct effects, but the effect that a tie may have on other market actors whose products or services are used in conjunction with the dominant undertaking's product.

Finally a normative proposal has been put forward subtly altering the wording of the test proposed in *Microsoft I*. The purpose of this is to maintain the positive changes brought about by the Microsoft test, such as a greater opportunity to use economic analysis to establish foreclosure, but alter the phrasing of the first arm of the test to bring greater clarity and provide greater emphasis on customer demand. The consequence of this alteration is that the test reflects the purpose of tying law more accurately, that is; to preserve the freedom of the customer to choose the combination of products that is most efficient and provides greatest utility to them.

The purpose of this chapter has been to demonstrate that the *Microsoft I* decision provides a watershed in the development of EU tying law. *Microsoft I* represents the beginning of the di-theoretical period. During this period the Ordoliberal aim of preserving customer freedom of choice remains consistent as in the mono-theoretical period, but in addition to this a post-Chicago style of analysis begins to be incorporated into the EU approach. From this point on economic empirical evidence and economic models of competitive harm begin to take an increasingly important place in establishing if and how a tie causes anti-competitive effects. The purpose of this chapter has also been to argue that the law was applied appropriately in *Microsoft I* and the criticisms laid against its assessment of separate products and foreclosure stem from taking certain parts of the decision out of context. However, use of the term "separate products" was problematic and only obfuscated the aim of the law and the test. To resolve this, a reformed test has been proposed that alters the wording of the law to make clear its meaning and purpose.

Chapter 6

Re-assessing the Microsoft I remedy

1.0 Introduction

This chapter will contribute to the thesis by explaining that the failure of the *Microsoft I*¹ remedy was not a result of faulty application of the test for tying *per se*, but rather an ill-considered remedy that did not take into account the particular characteristics of the market it was set in (unlike the assessment of tying itself). It will also demonstrate that there are superior, innovative remedies that could have been used to bring about the end of Microsoft's tie. These matters are important to the thesis for two reasons. First, it is important to establish that the failure of the remedy was not due to a flawed application of the law² by the Commission but due to flaws within the remedy itself. It is important to establish what caused the failure of the remedy to show whether it is the application of the law or type of remedies employed that needed to be amended. Second, once it is established that the failure of the remedy rests on flaws of the remedy itself, it is necessary to present normatively superior remedies so that in future decisions there are models that can be used or adapted in order to produce appropriate remedies that lead to greater effective competition.

The remedy in *Microsoft I* required Microsoft to release a version of Windows without Windows Media Player (WMP). Microsoft complied with this remedy and released "Windows N", a version of Windows without WMP. This version of Windows however did not attract any real customer demand.³ There are two main categories of academic opinion on why this happened. One group⁴ believes the case should not have been brought against Microsoft in the first

¹ Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 1043; T-201/04, *Microsoft v Commission* [2007] ECR II-3601

² As has been argued by some, see: Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 919, 922; T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 943

³ < <http://www.microsoft.com/presspass/legal/european/04-24-06windowsxpnsalesfs.mspx> > published April 2006 (accessed 29 May 2013)

⁴ Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 920; Jean-Yves Art, Gregory v.S. McCurdy, 'The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure' (2004) 25(11) *E.C.L.R.* 694, 697; Hedvig Schmidt, 'Article 82: is technological integration checkmated?' [2009] 4 *J.B.L.* 354, 370

place because integrating Windows and WMP was not really a tie. Some in this first group have used the lack of demand for Windows without WMP to suggest the decision in *Microsoft I* itself was flawed.⁵ Others⁶ have argued that the remedy itself lacked merit and failed as a consequence. Most in this second category recognise that the issue revolves around the fact that media players are usually priced at £0.00.⁷ The result of this is the rare situation where the price of a product is 0 and the cost of its implementation is likely to be >£0.00 due to search and implementation costs. It will be argued in this chapter that the failure of the remedy was a failure in its own right based on the circumstances of the market, specifically the price of media players, and the way the remedy was implemented, which did not take account of the cost of market actors integrating new media players.

Even amongst those who recognise that the flaw that led to the failure of Windows N lies in the *Microsoft I* remedy, what is missing from the debate are proposals for an effective substitute remedy. There is little discussion, including amongst those who recognise the deficiency of the original remedy, as to what would have been an appropriate remedy or what remedy should have been ordered. Out of those that do discuss alternatives,⁸ their consideration is brief, only considering one or two alternative remedies, and they do not fully consider the positive and negative effects that those alternative solutions could have.

⁵ Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 920; see also Microsoft's own arguments: T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 943

⁶ Renato Nazzini, 'The Microsoft Case and the future of Article 82' (2008) 22 *Antitrust* 59, 62; Pierre Larouche, 'The European Microsoft Case at the Crossroads of Competition Policy and Innovation: Comment on Ahlborn and Evans' (2008) 75 *Antitrust L.J.* 933, 955, 956-957; F Enrique Gonz Alez Diaz, Antòn Leis Garcia, 'Tying and bundling under EU competition law: future prospects' (2007) 3 *Competition L. Int'l* 13, 15

⁷ Roberto Pardolesi, Andrea Renda, 'The European Commission's Case Against Microsoft: Kill Bill?' (2004) 27(4) *World Competition* 513; Maurits Dolmans, Thomas Graf, 'Analysis of Tying Under Article 82 EC: The European Commission's Microsoft Decision in Perspective' (2004) 27(2) *World Competition* 225, 243; Renato Nazzini, 'The Microsoft Case and the future of Article 82' (2008) 22 *Antitrust* 59, 62; Pierre Larouche, 'The European Microsoft Case at the Crossroads of Competition Policy and Innovation: Comment on Ahlborn and Evans' (2008) 75 *Antitrust L.J.* 933, 957; F Enrique Gonz Alez Diaz, Antòn Leis Garcia, 'Tying and bundling under EU competition law: future prospects' (2007) 3 *Competition L. Int'l* 13, 15

⁸ Alan Riley, 'Microsoft break-up inevitable?' (2004) 39 *Euro. Law.* 10; Ian Ayres, Barry Nalebuff, 'Going Soft on Microsoft? The EU's Antitrust Case and Remedy' (2005) 2(2) *The Economists' Voice* 6 (article 4)

This chapter will consider a number of alternative remedies in order to establish which would be the most effective and would not be subject to the same weaknesses that undermined the original decision. This will be assessed primarily from an economic point of view; assessing the likely impact of each potential remedy on consumers, Microsoft and Microsoft's competitors. It is argued that a number of these alternatives would have had a far better effect than the remedy imposed by the Commission, while still maintaining fairness towards Microsoft.

This will be set out in the following way: First, the remedy itself will be explained and why it is generally considered to have failed. Second, it will be argued that the reason why the remedy failed was because it did not take into account the way in which Windows Media Player's development was funded and the additional cost involved to customers, particularly OEMs,⁹ in adding other media players. As a consequence of these two factors, it will be seen that the Commission's remedy did not offer an effective choice. Either the customer could pay for a product (WMP) and get it or pay for it and not get it. In short, it offered no choice at all. Third and finally, seven different remedies that were not implemented, but that could have brought Microsoft's tie to an end will be proposed, and their advantages and disadvantages explained. All but two of these proposals are the author's own work. The final remedy suggested is particularly novel and innovative. It is based on ordoliberal principles, and it is argued that it would not be subject to the flaws that have beset the original remedy and would provide greater competition in the market without causing an unnecessary burden to Microsoft, its competitors or consumers.

⁹ Original Equipment Manufacturers: in this case companies that manufacture computers and pre-install software on those computers before they reach the consumer.

2.0 The Remedy and Sanction

During the mono-theoretical period the Commission's use of sanctions were usually relatively simple. Under Regulation 17/62 Article 3¹⁰ the Commission had the power to require infringements to be brought to an end. The Commission did this by requiring the tie to be broken, allowing users to purchase the products/services independently. So for example, in *Hilti*¹¹ the order was given to bring their infringements to an end.¹² How this was to be done was not specified but one of the infringements was the tying of nails to the sale of cartridge strips.¹³ In *Tetra Pak*¹⁴ the Commission ordered Tetra Pak to amend or where appropriate delete from its contracts the clauses that were abusive, which included the clause tying their machines to their cartons.¹⁵ In other decisions such as *London European/Sabena* and *Napier Brown/British Sugar* the infringements had been brought to an end when the Commission began to intervene.¹⁶ Therefore no order needed to be made to terminate the infringements. As a consequence, during the mono-theoretical period, the Commission had not faced a situation where the remedy required was complicated. An order to simply end the infringement sufficed. In *Microsoft I* the products had been integrated together and given a single price, while the price of the tied product alone was nominally zero. This meant that for the first time the Commission faced trying to forge a remedy for a market that had much more complicated characteristics than the markets in previous decisions.¹⁷

The remedy that the Commission implemented to resolve Microsoft's tying behaviour was to require them to offer a version of Windows for client PCs

¹⁰ Council Regulation (EEC) 17/62 of 6 February 1962 First regulation implementing Articles 85 and 86 of the Treaty [1962] OJ L13/204 Now Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 (now 101 and 102) of the Treaty [2003] OJ L1/1, Article 7

¹¹ *Eurofix-Bauco v Hilti* (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19

¹² *ibid* Article 3

¹³ *ibid* Article 1

¹⁴ *Tetra Pak II* (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1

¹⁵ *ibid* Article 3(1)

¹⁶ *London European – Sabena* (IV/32.318) Commission Decision 88/589/EEC [1988] OJ L 317/47, para 35 and *Napier Brown – British Sugar* (Case IV/30.178) Commission Decision 88/518/EEC [1988] OJ L 284/41, para 82

¹⁷ The relevant complicating factors will be established and analysed below.

which did not include WMP. Microsoft retained the ability to offer users a bundle of Windows and WMP in addition to the version without WMP.¹⁸ This remedy was upheld on appeal by the Court of First Instance.¹⁹ It is important to note when considering the discussion below that the remedy imposed by the Commission, although legally successful in the sense that it was put into effect by Microsoft, it was commercially unsuccessful in terms of sales volume. In the time Windows with WMP had sold 35.5 million copies, Windows without WMP sold 1,787 copies.²⁰ The reasons for this will be considered later in the chapter.

It was also ordered that a monitoring trustee be appointed to ensure that the Commission was in a position to efficiently oversee Microsoft's compliance with the Decision.²¹ This was repealed by the CFI.²²

As a consequence of Microsoft's breaches of EU competition law (not only tying but also for failing to provide interoperability information for Microsoft's workgroup server systems²³) the fine imposed on Microsoft was €497,196,304.²⁴ This was also upheld by the General Court.²⁵ This was a record breaking fine at the time and no doubt a fine of great magnitude. But the size of the fine is put in perspective when it is considered that it amounts to less than six days' sales for Microsoft.²⁶ The monitoring trustee, provision of interoperability information and the fine are not the subject of this chapter, but they are noted here for context.

¹⁸ Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 1011

¹⁹ T-201/04, Microsoft v Commission [2007] ECR II-3601, para 1229. The substance of the decision has been explored in detail in Chapter Four.

²⁰ < <http://www.microsoft.com/presspass/legal/european/04-24-06windowsxpnsalesfs.mspx>> published April 2006 (accessed 29 May 2013)

²¹ Microsoft (n 18) 1043-1044

²² Microsoft (n 19) para 1278-1279: this was on the basis that the Commission had "no legal basis" for imposing such a requirement and "therefore exceed[ed] the Commission's powers of investigation and enforcement".

²³ It should be noted that the discussion of interoperability information and the offences associated with it are beyond the scope of this thesis as they do not pertain to tying.

²⁴ Microsoft (n 18)

²⁵ Microsoft (n 19) para 1366-1367

²⁶ Alan Riley, 'Microsoft break-up inevitable?' [2004] European lawyer 10

2.1. The Remedy Failure

It is widely accepted that the *Microsoft I* remedy was a “commercial failure”.²⁷ It could therefore be assumed that the Commission’s reasoning/rationale for the decision was flawed. The Commission had based its decision on the fact that two products were being sold by Microsoft as one, namely operating systems and media players. To determine whether the products were being tied the Commission found that media players and operating systems were subject to independent customer demand. The Commission was of the view that there was customer demand for media players on their own, without operating systems. If this conclusion was correct then it would be expected that, given the option (that had previously been denied to them by Microsoft), a substantial number of customers would purchase Windows N (Windows without WMP), and choose to source their media player elsewhere. The fact that this did not happen in considerable numbers, implies that the Commission had erred in its decision.

Microsoft used the commercial failure of the remedy as a foundation to attack the test used in the decision on appeal before the Court of First Instance.²⁸ Microsoft argued that the commercial failure of Windows N showed that the Commission failed to appropriately assess whether or not WMP was a separate product. The Court rejected this argument, but only on the procedural ground that the Court was only to analyse the lawfulness of Community measures by reference to matters of fact and law existing at the time when the measure was adopted. Therefore since the Commission could not have considered the inference of the failure of the remedy because the remedy had not been ordered at that point, neither could the Court. The Court also stated that such facts did not in themselves prove that the finding of separate products was incorrect.²⁹ But it is noteworthy that the Court did not or could not address in its judgment why Windows N failed to draw customer demand or what part of the test/remedy was at fault.

²⁷ Pierre Larouche, 'The European Microsoft Case at the Crossroads of Competition Policy and Innovation: Comment on Ahlborn and Evans' (2008) 75 *Antitrust L.J.* 933, 955

²⁸ *Microsoft* (n 19) para 943

²⁹ Although it did not say why this might be the case; *ibid* para 943

The commercial failure of Windows N also paved the way for commentators to criticise the Commission's decision. Rather than criticise the remedy itself (as will be discussed below), Ahlborn and Evans supported the remedy³⁰ and instead suggested that the failure of Windows N was proof that there was no demand for an operating system without a media player and that the result suggested that the competition enforcement authorities had applied the demand test incorrectly.³¹ Microsoft's press centre³² even took the opportunity to highlight the lack of demand and the views of OEM manufacturers who did not see the benefit of sourcing operating systems without media players.³³ Therefore it can be seen generally that the lack of demand for Windows N has allowed the decision's critics to point to the remedy failure and suggest that it is a symptom of a flaw in the substantive test for tying (discussed in Chapters Four and Five) rather than addressing the remedy, which, it is argued, is the real weakness in the decision.

As such, it is very important to understand why the remedy failed. If it failed on its own merit, then the remedy must be altered, if it failed due to a flawed application of the substantive test, then the Commission (and Court) must concede that a mistake was made and correct future application of the tying test.

2.2. The remedy's flaw

The fact that customers continued to purchase Windows with WMP and not purchase Windows N and source their own media player suggests one of the following:

³⁰ Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 919, 922

³¹ *ibid* 923

³² Microsoft's department that publishes news on government regulations, legal news, corporate affairs, public policy etc.

³³ < <http://www.microsoft.com/presspass/legal/european/04-24-06windowsxpnsalesfs.mspx>> published April 2006 (accessed 29 May 2013)

1. the Commission was wrong in its factual assessment and there was no independent demand for media players;
2. there was demand for standalone media players, but customers only wanted these in addition to WMP not instead of it;
3. the opportunity to purchase Windows free from WMP was ordered by the Commission in a flawed way.

It is submitted, that the third explanation is the most important.

Windows with WMP and Windows without WMP were priced exactly the same. This provided no incentive and a strong disincentive for OEM manufacturers and consumers to buy Windows N. This is because, first the price of WMP was part of the price of Windows, and second, there was an additional cost to customers, particularly OEM manufacturers, in installing additional media players. These two points are discussed below:

2.2.1. The true cost of Windows Media Player

The EU competition authorities accepted that WMP was not distributed to customers without cost being incurred by Microsoft.³⁴ The cost of its development by the software developer was never a work of charity. Rather the cost of the time and effort that the programmers took to write WMP would be recouped in the price charged for Windows itself. Everyone who paid for Windows was at the same time paying for the development of WMP. It is not surprising therefore that when Microsoft offered Windows N for the same price as Windows with WMP there was little up take. After all, it would have made little sense in any of the previous tying cases if the undertaking at fault was able to continue to offer (taking the example of Hilti) cartridges alone for price 'X' or cartridges and nails for the same price. Essentially that would not eradicate the tie. It would just change it from a contractual tie to an economic tie, as many commentators have noted.³⁵ Therefore to offer Windows N at the

³⁴ Microsoft (Case COMP/C-3/37.792) [2005] 4 CMLR 965 see foot notes 945, 971; Case T-201/04 Microsoft v Commission [2007] ECR II – 3601, para 948

³⁵ Maurits Dolmans, Thomas Graf, 'Analysis of tying under Article 82 EC: the European Commission's Microsoft decision in perspective' (2004) 27(2) W. Comp. 225, 243; Renato Nazzini, 'The Microsoft Case and the future of Article 82' (2008) 22 Antitrust 59, 62; Pierre Larouche, 'The European Microsoft Case at the Crossroads of Competition Policy and

same price as Windows with WMP was equivalent to offering users the option to have WMP or leave it, but be required to pay for it either way.

A significant problem then is that unlike Microsoft's competitors such as RealPlayer, WMP is essentially cross subsidised through the sale of Windows. So when a customer pays for Windows, they pay for WMP whether they want to or not. This explains how Microsoft is able to offer downloads of WMP free of charge, while RealPlayer's free version used advertising to generate revenue. Unless the remedy took account of this factor it would not give customers a genuine choice to obtain Windows, not only free of WMP, but free from the cost of developing WMP.

2.2.2. The cost of adding additional media players

When assessing the foreclosure effect that Microsoft's tie was likely to have on competitors, the Commission recognised that OEM manufacturers would be unlikely to bundle an additional media player alongside WMP because it would require them to "expend additional effort obtaining and loading separate multimedia playback software".³⁶ But they appear not to have recognised that this disincentive would remain if Microsoft was allowed to offer both Windows and Windows N at the same price. It poses the question to the OEM manufacturer: would they like a product that they have implicitly paid for (WMP), or would they prefer to implicitly pay for it, not receive it and have to spend further resources seeking to obtain, test and install an alternative media player? It is difficult to believe the rational customer or OEM manufacturer would elect the second option. When the remedy is viewed in this manner there is no surprise that customers eschewed Windows N, there was no rational incentive to select it.

Innovation: Comment on Ahlborn and Evans' (2008) 75 Antitrust L.J. 933, 957; F Enrique Gonz Alez Diaz, Antòn Leis Garcia, 'Tying and bundling under EU competition law: future prospects' (2007) 3 Competition L. Int'l 13, 15

³⁶ Microsoft (n 18) para 851

3.0 Alternative remedies

It is clear from the above that the remedy imposed on Microsoft was ineffective. It is argued that in future, if competition law is to be applied effectively, it is essential that the remedies given by the Commission and courts are economically sound. On occasion, this will mean that the remedies' economic impact will require the same careful consideration as the assessment of the effect of the tie itself. It is argued that the aim of the remedies must be to preserve the freedom of choice of the customer, while being carefully formulated to cause as little disruption to the market as possible, and where possible use the market to work with the remedy rather than against it. This is because the purpose of the law on tying is to preserve the freedom of customer to choose the combination of products they find of greatest benefit,³⁷ and because, due the dynamic nature of the pricing mechanism, courts are ill-situated to make decisions about price.

With this in mind, it is important to consider what alternative remedies could have been implemented in the *Microsoft I* decision. Three alternative remedies have been put forward by Riley and Ayres and Nalebuff. These are:

- The break-up of Microsoft;³⁸ and,
- Unbundling and a 'must carry' clause³⁹

These represent only a small number of the possible remedies however. It is argued that a plethora of potential remedies exist, each with strengths and weaknesses to be evaluated. These are particularly important to consider in

³⁷ As demonstrated in Chapter Four

³⁸ Alan Riley, 'Microsoft break-up inevitable?' [2004] *European lawyer* 10, 11

³⁹ Ian Ayres, Barry Nalebuff, 'Going Soft on Microsoft? The EU's Antitrust Case and Remedy' (2005) 2(2) *The Economists' Voice* (article 4) page 6; It should be noted that Stucke analyses the failure of the *Microsoft I* remedy using the lens of behavioural economics. Stucke postulates that customers perceived Windows N as an inferior product due to their reference point being Windows with an integrated media player. However the alternative remedy that is suggested is one version of Windows with WMP and one version of Windows with a choice of three media players. This is a variation of the must carry remedy, see; Maurice E. Stucke, 'Behavioural antitrust and monopolization' (2012) 8(3) *Journal of Competition Law & Economics* 545, 570

light of the failure of the remedy ordered by the Commission. What follows is consideration of a number of such remedies with the merits and drawbacks of each noted individually. Two are remedies that have already been suggested by Ayres and Nalebuff, (1 and 4 below) the following five are all models that the author has developed. The object of this analysis is to establish which remedies would maximise competition in the market,⁴⁰ while interfering as little as possible with normal market forces and establish which remedies would fail and why they would be likely to be ineffective. This is a normative analysis, the purpose of which is to establish how innovative remedies can, and need to be used in complex markets to help restore competition in the market.

The remedies that will be considered are as follows:

1. Must not carry Windows Media Player;
2. Must not integrate Windows Media Player;
3. Must only carry a basic version of Windows Media Player;
4. Must carry a/multiple competitors' media players;
5. Must not cross subsidise Windows Media Player;
6. Must offer screen choice;
7. Must behave 'as if' subject to competition.

3.1. Must not carry Windows Media Player

Concept

A 'must not carry' remedy would require Microsoft to provide all of its versions of Windows without WMP integrated. OEMs would also only be able to acquire Windows without WMP. WMP could still be obtained from other sources, for example downloads, but the customer would not be able to buy Windows and WMP together "out of the box", directly from Microsoft.

⁴⁰ See on the purpose of competition law remedies: Douglas Melamed 'Afterword: The purposes of antitrust remedies' (2009) 76 Antitrust Law Journal 359. Compensation, punishment and deterrence, terminating and preventing unlawful conduct and restoring competitive condictions to the market.

Advantages

If Microsoft was required to provide Windows without any media player then this would require the consumer or OEM to actively search out a media player and as a result they will be more likely to pick one that is genuinely the most suitable for their needs. The need for a media player may well prompt the consumer to check consumer information websites or the OEM to choose the most efficient media player, bringing back a real element of innovation competition to the market rather than consumers merely using WMP due to the fact that it is already installed. Anyone who really wants WMP due to its merits would be able to download it straight from Microsoft.

Disadvantages

Forcing Microsoft to provide Windows without any sort of media player could give validity to Microsoft's (previously erroneous) argument that it is being forced to provide consumers with a degraded piece of software. Also while most consumers are probably perfectly capable of downloading their own media player, a reasonable proportion of the computer buying population may find the process difficult and as a result they may make mistakes or be taken advantage of by websites providing malware. In addition, it could set Microsoft at a disadvantage compared to undertakings like Apple who would still be able to provide their operating systems with their own media players, since they are not likely to be considered dominant undertakings on the operating system market.

3.2. Must not integrate Windows Media Player

Concept

Must not integrate is a similar remedy to "must not carry". Microsoft would not be able to provide any versions of Windows that automatically install WMP with Windows. However unlike the 'must not carry' remedy the end user, if they wish to use WMP, can instead simply re-insert the Windows CD and install WMP as an additional optional component. This is how WMP's

predecessor “NetShow” was installed. If the customer wanted to install WMP then this could be done simply by inserting the Windows CD and running an ‘add program’ feature which would then add WMP to the configuration.⁴¹

Advantages

This remedy would undermine any argument that Microsoft is being forced to provide a degraded product and anyone who wishes to install WMP could do so by following simple instructions that Microsoft could include with computers sold with Windows. If the consumer attempts to open any content that is coded in Microsoft’s format, a prompt could explain how to install WMP from the Windows CD.

Disadvantages

Consumers who do not understand the importance of a media player may neglect to install any media player at all. This could mean that they may not access as much content as they may not want go through a set up process they feel they do not understand, although this is made all the less likely by the CD being Microsoft’s own product. Those who try to access non-Microsoft media formats may also be at a loss as to how to access other media players if not given appropriate guidance, placing other media players at a disadvantage.

3.3. Must only carry a basic version of Windows Media Player

Concept

It was noted in the Microsoft Commission decision that WMP tended to incorporate many of the functions of a premium media player into its free version. As a result it was more difficult for other media players to compete when consumers had access to what was in essence a premium product equally as good as their own without any cost.⁴² Under this remedy Microsoft would be required to only provide a basic version of WMP with each version

⁴¹ Microsoft (n 18), para 988 explains that this is how WMP predecessor ‘NetShow’ functioned.

⁴² *ibid* para 847

of Windows, and any upgrades that enabled access to a full version would be paid for by the customer.

Advantages

If Microsoft was required to offer only a basic version of WMP on their systems, this would allow users to take advantage of a pre-installed media player, which would be an advantage for those who were not familiar with technology, while still providing another market in which Microsoft and other media player providers could compete; a competitive premium market.

Disadvantages

This solution would be forcing Microsoft to provide a less capable version of their product to consumers. While this would maintain a competitive premium market it would be interpreted by many as protecting competitors at the cost of consumer welfare. After all, it would be restricting consumers' access to high quality media players in order to enable competitors to continue to compete in the market. It would not save consumers money as a high grade version of WMP would still be produced and may be offered without charge (i.e. the production cost would be subsidised through the sale of Windows). So once again this remedy would be requiring consumers to pay for Microsoft to make a full version of WMP then forcing Microsoft to give them an inferior version. This would not maximise consumer welfare. Therefore, for this reason, this remedy is not ideal, assuming that the Commission and courts are pursuing the goal of consumer welfare in accordance with post-Chicago principles.⁴³

3.4. Must carry competitors' media player(s)

Concept

⁴³ In relation to the post-Chicago arguments for consumer welfare being the correct standard see: Steven C. Salop, 'Question: What is the real and proper antitrust welfare standard?' [2010] 22 Loy. Consumer L. Rev. 336, 338. The Commission's use of post-Chicago analysis will be considered further in Chapter Seven.

A 'must carry' remedy would require Microsoft to provide Windows with competing third party media players pre-installed. For example, Microsoft may be required not only to provide Windows with WMP, but also perhaps 50% of their sales with RealPlayer and 50% with Apple's Quicktime. In the alternative Microsoft could be required to provide 100% of its Windows sales with a particular third party media player in order to it give equal distribution.

Advantages

If Microsoft was required to provide Windows with at least one other media player then this would help ensure that there was a similar reach to those media players that were included with Windows as well as WMP. This could help stimulate content production in other formats because whichever format the content producer codes in there is going to be a similar reach to WMP. This would then make the decision less about reach and more about the technical superiority of each media player. This in turn would stimulate innovation and ensure that there is a healthy level of investment in media player technologies as each player would rise and fall on its technical merits, rather than on the merits of other programmes (such as operating systems) that the undertaking may also produce.

Disadvantages

There are a number of disadvantages to this remedy. First, it seems difficult to decide how media players would qualify for being carried by Microsoft. Too many players and this would slow the computer down and could create confusion for the consumer. Too few and this could exclude media players that are technically very effective and could provide use to consumers. In the Microsoft case itself Microsoft raised objections to any 'must carry' remedy.⁴⁴ Art and McCurdy have also made great efforts to explain how Microsoft would have "numerous objectively justified reasons for declining" to carry their competitors' media players.⁴⁵ These include the argument that by forcing Microsoft to incorporate competitors' code, this would effectively make

⁴⁴ Microsoft (n 18) para 976

⁴⁵ Jean-Yves Art, Gregory v.S. McCurdy, 'The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure' (2004) 25(11) E.C.L.R. 694, 704

Microsoft a guarantor of the quality and security of the competitor's code and its ability to interoperate successfully with Windows. They also argue that such a requirement could impose significant testing requirements and costs on Microsoft. They say it could create "unknown direct and contributory" third party IP exposure relating to competitor's code. Or it could make Microsoft liable for access language and other regulatory compliance and language issues. For these reasons they considered that any attempt at a must carry remedy would not be successful.⁴⁶ In addition Ayres and Nalebuff have noted that even if Microsoft had to carry their competitors' media players this would not be sufficient. This is because the issue would remain that a content provider may decide only to code in WMP format because it would be sufficient to reach almost all computers,⁴⁷ particularly if the remedy only applied within the EU. Therefore in order for the remedy to be effective Microsoft would need to be required to licence a substantial number of computers with *only* their competitors' media players installed. This combination of factors places an unfair burden upon Microsoft.

3.5. Must not cross-subsidise Windows Media Player

Concept

If Microsoft was required to ensure WMP was not cross subsidised by Windows this would mean that Microsoft would be required to hold separate accounts for its WMP business and its other software business. As a consequence Microsoft would have to find revenue streams that would support the promotion, production and maintenance of WMP that would be independent of Windows sales. Through this mechanism, Microsoft could be required to charge differing prices for Windows and Windows N. Microsoft would still be able to provide versions of WMP free of charge, however they would potentially have to support the provision of these free versions through advertising or other revenue streams.

⁴⁶ Jean-Yves Art, Gregory v.S. McCurdy, 'The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure' (2004) 25(11) E.C.L.R. 694, 703-704

⁴⁷ Ian Ayres, Barry Nalebuff, 'Going Soft on Microsoft? The EU's Antitrust Case and Remedy' (2005) 2(2) The Economists' Voice (article 4) page 6

Advantages

Theoretically, this remedy would provide a genuinely level playing field between Microsoft and any media player producers that do not have an operating system with which they can tie their media player. Microsoft would either have to charge for WMP or in the alternative WMP would have to use advertising or some other revenue stream in order to support its media player. The result of this would be that Windows with WMP would include an additional charge that would reflect the cost of developing WMP and customers would be able to choose whether or not they consider WMP worth that additional cost. It would allow customers to compare the cost of WMP with the value of purchasing other media players. They would also have the opportunity to purchase Windows genuinely free from WMP, not just of the software itself, but also free from the additional costs that are incurred in its development, promotion and sale.

Disadvantages

To begin, the difficulty in ensuring a separate account for WMP would be significant. A totally separate team would have to be established for coding WMP and they would need to account for their profits essentially like a separate company. This is unlikely to be efficient particularly when software is produced on a global scale. In addition, this would still fail to place Microsoft on a genuinely level playing field with its competitors since Microsoft's competitors are presumably seeking to make a profit through the sale of their media players, whereas Microsoft could choose to rely on the profits it receives through the sale of Windows and run its WMP operation so that it is either loss making, or only just covering its costs. This would allow Microsoft to sell WMP for a much lower price than their competitors. Further, even assuming WMP could be run like a separate company it can be assumed that Microsoft would pay to licence WMP with Windows. Microsoft sells such a high volume of Windows operating systems that with only Windows as its main client, WMP would be able to charge virtually zero for the use of WMP

with each unit of Windows sold. This would put Microsoft back into the position of being able to sell Windows and Windows N at virtually the same price. This would mean that this remedy would have the same result as the original Commission decision.

If, in the alternative, the Commission not only required WMP to hold separate accounts but also prevented Microsoft from paying for WMP to be licensed with Windows, then this would incur all the disadvantages associated with a 'must not carry' remedy. As such this remedy is unlikely to be effective.

3.6. Must offer choice screen

Concept

Microsoft would not include a pre-installed media player but rather provide a choice screen on first start up with the most popular media players in a random order. Each popular media player would have a roughly equal chance of being picked and each undertaking would be free to promote their media player through advertising in order to make it more likely that consumers would pick theirs. If customers do not like the media player they pick first they could download another and uninstall the media player they picked initially.

Advantages

This remedy would incur virtually no extra cost for either Microsoft or their competitors. It would also spur competition, since consumers would be more likely to consider a number of options before making their decision. The process could also be very simple providing little inconvenience for those unfamiliar with complicated software processes. It would also mean that customers still have access to a media player very soon after they take the computer out of the box.

Disadvantages

First the few computers that are not linked up to the internet may never get a chance to download a media player. While this is not a serious problem in

practice (those without an internet connection are unlikely to get a lot of use from a “streaming” media player) some aspects of functionality maybe lost such as audio play back or video viewing. In order to combat these issues this remedy may need to be accompanied by one of the previous remedies mentioned, such as providing a media player on CD or providing a basic, scaled down media player with the operating system.

Second although those undertakings that provide media players that are already successful would benefit from such a system, it may provide a lesser benefit to those undertakings that are not yet established in the market as they would be unlikely to make it onto the list of the most popular media players.⁴⁸ To compensate for this they would probably have to invest a large amount of capital into software promotion which is likely to be difficult for undertakings without substantial resources. Nonetheless, it would be unlikely that they would find it any harder to increase their market share than they would under the current system. As such this remedy has relatively minor draw backs and is viable.⁴⁹

3.7. Must behave ‘as if’ subject to competition

Concept

The final and most innovative remedy is based on the idea of requiring a dominant undertaking to behave as if it is subject to competition. This option is not the most invasive, but could be nonetheless controversial. Under this scheme Microsoft would be able to provide WMP integrated into only a certain percentage of the copies of Windows it sells. It is envisaged that the percentage would be between 20-33% of copies sold. The other copies would be sold without WMP. The underlying idea for this is that if the operating system market was competitive, it would in likelihood have at least 3-5 main

⁴⁸ There are also figures to suggest that if the browser choice screen is to be taken as an example, ‘choice screens’ may not have much impact overall, see: Hein Hobbelen, Joelle Jablan, ‘Presentational issues in the Microsoft II case: fair chance for all browsers or a European Commission imposed advantage for existing market players?’ (2011) 32(4) E.C.L.R. 206, 211

⁴⁹ As will be seen in Chapter Seven, the approach of using a choice screen was taken up by the Commission in the later “Microsoft II” commitments decision.

competitors with the market distributed between them. If this was the case then even if Microsoft did tie their media player with their operating system they would only be able to reach between 20-33% of the market (assuming roughly equal distribution of market share). This would prevent any foreclosure effects because 20-33% of the market would not be enough to allow content producers to code in only one format. In terms of enforceability Microsoft could be required to account for sales at the end of each financial year and for every unit sold with WMP over the pre-determined level it would be fined a small amount. This would provide an incentive to ensure Microsoft conformed with the order.

Advantages

The fact Microsoft would not be required to carry any other media player would prevent Microsoft from being required to guarantee the interoperability of competitors' code or any of the other issues associated with the 'must carry' remedy. Another benefit of this remedy is that it could lead to a natural change in price between Windows and Windows N. Under normal circumstances it would be very difficult for the Commission or court to accurately determine what the value of WMP is. Due to the high fixed costs and the virtually non-existent marginal costs of producing software it would make any evaluation of what the difference in price should be extremely difficult. This remedy would allow the market to decide what the extra value is of having Windows with WMP included. This is because, subject to supply and demand customers will be willing to pay more in order to get one of the versions of Windows with WMP integrated, if that is what they want. Or they will be happy to pay a little bit less for a version of Windows N. So the market will decide the value of buying Windows with WMP, not the Commission or courts.

Further since media players are usually distributed free, and there would be nothing to prevent Microsoft continuing to offer WMP free to download, the change in price between Windows and Windows N would represent the value to the customer, not of WMP, but rather the value of having WMP integrated. This differentiation in price would be desirable as the cost of acquiring WMP

on the market is £0, but to some users, particularly those who are unfamiliar with computers there would be some value in buying Windows with WMP already installed and integrated.

The change in value can be demonstrated as follows:

If

the value of Windows is X

the value of a media player is 0

the cost of (a consumer or OEM) installing a media player is Y

Then:

If the cost of Windows with WMP $> X + Y$ then the customer will purchase Windows N and install a media player themselves (if they are an OEM they can incorporate the installation as part of their production process).

Therefore under this remedy the true value of integration will be dictated by the market. Those customers (whether OEMs or retail customers) who value WMP being pre-installed will continue to purchase Windows. They will be willing to pay a higher amount for the pre-installation. Once the price reaches a stage where it is cheaper for the customer to install a media player themselves (be it WMP or Real or QuickTime or any other media player) they will switch to purchasing Windows N and install the media player themselves. Of course, this would not prevent OEMs from installing WMP on all their computers if that is what they wanted. But if they considered another media player superior they would equally be able to choose that instead.

Disadvantages

The primary disadvantage with this remedy is that there is the potential for a decrease in consumer welfare. It would depend on how the market responded. For example, assuming the cost of installation of a media player to an OEM was €0.20, if Microsoft previously sold Windows at €120 per unit, after this

remedy was implemented the price of Windows could perhaps rise to €120.20 while the price of Windows N would remain at €120.00. Equally the price of Windows could remain at €120 and the price of Windows N could drop to €119.80. Either way the difference in price is likely to be very small per unit. It would make virtually no difference at all to the retail purchaser. However, for large companies that sell thousands of computers per week, the figure would not be insignificant. An increase in the price of Windows caused by the action of competition authorities would be at best an inconvenience and at worst a reduction in welfare for those whom competition law is supposed to protect.

It is argued that this would not happen in practice for two reasons:

3.7.1. Payments from third parties

It is argued that there would be no real change in cost whatsoever to the end user as a result of this remedy. Even if the price of Windows increases and the price of Windows N stays the same, third party software producers often pay OEMs a small amount to have their software pre-installed on computers before they are sold. This sum would more than cover the cost of installation of a non-Windows media player.⁵⁰ So there would be no price difference at the retail level, but there would be an increase in choice.

3.7.2. Payments from Microsoft

Once the remedy was instituted, Microsoft would be very likely to start losing market share in the short term. To counter this Microsoft would probably start to employ the same payments to OEMs to install their media player usually associated with third party software manufacturers. These payments would at least compensate the OEMs for the cost of having to install WMP on their systems. These payments would ensure that the price of Windows with media player would never really depart too far in either direction from the price of Windows N.

⁵⁰ If these payments were not sufficient to cover the cost of installing a piece of software then no rational OEM would ever agree to them.

3.7.3. Further effects

The remedy would also drive an increase in demand for third party media players since around 75%-66% of Windows systems would be sold without a media player. This increase in demand would have the impact of decreasing the amount of capital third party media player producers have to pay to ensure their products are placed on OEM computers. This would provide them with more capital to invest in product development. OEMs on the other hand may not have any less capital as Microsoft would be in a position where it would also need to make payments to ensure the deployment of their own media player. As a result the cost to the consumer and the effect on prices would be neutral. The situation would be virtually the same as before the remedy was imposed, except for three vital differences: first, the cost of promoting and disseminating media player software would be divided between Microsoft and its competitors more evenly. Second, a large proportion of OEMs and retail customers would actively choose their media player forcing Microsoft and its competitors to compete on the merits of their media players rather than any other software they produce. Third, with no foreclosure effect consumers would be able to choose which way the market tips rather than a dominant undertaking.

The result in this scenario would be that Microsoft would have to compete with other media players on level terms. Costs would be unlikely to change for OEMs and as a result unlikely to change for consumers. Profits would increase for third party developers leading to better products, more innovation and potentially lower prices. Microsoft would be required to pay to receive greater distribution just like its competitors, however it would still be able to tie a certain amount of its sales so that it would not be at any greater disadvantage than one of its smaller competitors that also tie their operating systems with their media players (e.g. Apple + Quick time). Perhaps most importantly competition would remain in the media player market so Microsoft would not be able to “switch off” innovation once it had driven its competitors out of the market (assuming it was able to do so). All this happens by taking a very small amount of the power held by Microsoft and returning it to the other competitors on the market. This puts the value back into the media player

software itself, rather than its technical value being dwarfed by the importance of (and the prevalence of) the operating system to which it is tied. Microsoft could of course still win the race for format dominance, if it did so under this remedy however, it would have done so due to the superiority of its product, not out of the dominance of its operating system.

4.0 Conclusion

It has been shown that the remedy imposed by the Commission in *Microsoft I* was flawed because it did not take into account two important factors: first, that the price of WMP was essentially cross subsidised by the purchase of Windows. The consequence of this is that customers who bought Windows would always be required to pay for WMP, but if they chose to purchase Windows N they would indirectly pay for WMP and not receive it. Second, although OEMs may have wanted to integrate third party media players, this carries with it an inherent cost. These costs include search costs, testing costs, installation and support costs. Due to these costs OEMs would not want to purchase Windows without WMP as they would not only be paying the price of WMP without receiving it, they would also then be exposing themselves to the greater costs of installing another.

What can be seen then is the ideal remedy would take into account the cost that OEMs would incur in installing third party media players in order to remove the fiscal disincentive of doing so.

It has also been explained that while there has not been much discussion on alternative remedies, there are a number that could be employed. Some of these, such as the “must carry” remedy would be overly oppressive to Microsoft. Others, such as the “must not cross subsidise” remedy would not be practical to implement. Other remedies would decrease consumer welfare for the sake of protecting competitors, such as the “must only carry a basic version of WMP” remedy. But most importantly there are at two remedies that have very little, if any, negative impact on the market, Microsoft or consumers, while strengthening competition and giving users’ greater choice. It is argued that both these remedies do not cause harm to the consumer⁵¹ while maintaining the freedom of the customer to choose the combination of products that provides them with greatest utility.⁵² These remedies include the

⁵¹ Consumer harm here is given the meaning understood in post-Chicago analysis

⁵² As dictated by the Ordoliberal School of thought

“choice screen” and the “must behave ‘as if’ subject to competition” remedy. The former remedy by-passes the need for any media player to be installed, while the latter uses supply and demand conditions to dictate a change in price that compensates OEMs (or retail consumers) for the extra time and effort that is required to search for and install a media player of their choice. This prevents the Commission and courts being required to try to guess the value of WMP and its integration into Windows but still provides an incentive for customers to purchase Windows N and source their media player from the best provider on the market.

This chapter explained that the failure of *Microsoft I* remedy was due to the poorly constructed remedy, not faulty application of the law. The Commission failed to take into account the particular characteristics of the market and as a consequence provided a remedy that turned a technical tie into an economic one. It has shown that the Commission, which took account of the disincentives of sourcing third party media players in their assessment of the foreclosure of the market caused by the tie, ignored those same disincentives when crafting the remedy. Finally this chapter has shown that there are other, innovative remedies that could have been implemented to help restore competition and innovation to the market. As a whole this is relevant as it demonstrates that the major changes that need to be made to the approach taken in *Microsoft I* regard the remedy not the application of the law.

Chapter Seven

EU Tying Law Post-*Microsoft I*

1.0 Introduction

This chapter considers the period since the *Microsoft I* decision until the present¹ (“post-*Microsoft I*”). The purpose of the chapter, within the thesis, is to show that during this period the Commission’s aim has continued to be the preservation of customer freedom in accordance with Ordoliberal² thinking. This chapter will also show that post-*Microsoft I* the Commission has made deliberate attempts to incorporate post-Chicago theory into its analysis. This means that *Microsoft I* is a watershed in the Commission’s decision making. Prior to *Microsoft I* was the mono-theoretical period when only Ordoliberal principles informed the Commission and courts’ approach. From *Microsoft I* and post-*Microsoft I* the Commission and courts’ enter the di-theoretical period,³ where Ordoliberal principles remain fundamental, but are pursued using post-Chicago⁴ analysis. Establishing this is important as it allows the law to be understood more fully. It explains that the aims that were pursued during the mono-theoretical period are still important but demonstrates that these aims are now informed by the latest post-Chicago models. This helps to explain how decisions are likely to be made in future and what factors are likely to be important in making the decision.

The second substantial contribution this chapter will make will be through a novel analysis of the Commission’s approach to tying in software markets. It will be argued that the Commission has a particular approach to software markets that departs from that which it uses in conventional markets. It will be shown that the software markets have unique qualities that explain why the Commission takes a different approach. It is these qualities that allow a dominant undertaking to take advantage of “choice evasion”. This is a novel concept developed by the author to describe the concerns of the Commission

¹ 2014

² See Peacock, A.T. and Willgerodt, H. (Eds), *Germany’s Social Market Economy*, (London, Macmillan 1989) p35; Walter Eucken, (1948/1982). The social question and Böhm, Forschungs-und Lehrgemeinschaft’, 162; Nils Goldschmidt, Michael Wohlgemuth, ‘Social Market Economy: origins, meanings and interpretations’ CPE (2008) 19 269

³ This period could also be called the poly-theoretical period, as the Commission has also taken on concepts from the Chicago School (discussed below). However, these are few in number and as a whole the style of investigation adopted by the Commission reflects post-Chicago analysis to a much greater extent.

⁴ See Chapter 3

in the software market. It will be explained what choice evasion is, how it works and why it is a concern for the Commission. This will then allow the author to provide guidance and direction for dominant software undertakings so that they are able to demonstrate they are not exploiting choice evasion and consequently; comply with the law and avoid litigation.

These arguments will be set out as follows: First, the impact of the Commission's Guidance⁵ will be assessed. Post-*Microsoft I*,⁶ the European Commission published its long-awaited Guidance on its enforcement priorities in applying Article 102.⁷ It will be seen that the Guidance incorporates principles and models that are post-Chicago in nature. This is the first formal recognition that the Commission is deliberately taking an increasingly economics focused approach, an approach that incorporates the most recent economic theory and seeks to ascertain whether anti-competitive effects are possible or likely as a consequence of the alleged tying behaviour in that specific instance. This is likely to be in response to criticism⁸ that the EU approach to tying is not economically focused. At the same time it will be shown that the Guidance continues to demonstrate that the Commission's aim is to preserve the ability of customers to exercise their freedom of choice.

Second, the Commission's commitments decision with Microsoft⁹ will be considered. This decision will be referred to as *Microsoft II* decision for ease of understanding. In *Microsoft II* the Commission objected to a second alleged

⁵ Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02

⁶ *Microsoft* (Case COMP/C-3/37.792) [2005] 4 CMLR 965; Case T-201/04 *Microsoft v. Commission*: [2007] ECR II-3601

⁷ Commission Guidance (n 5)

⁸ See: Liza Lovdahl Gormsen, Why the European Commission's enforcement priorities on article 82 EC should be withdrawn (2010) 31(2) E.C.L.R. 45, 45; J. Kallaugher and B. Sher, "Rebates Revisited: Anticompetitive Effects and Exclusionary Abuse Under Article 82" [2004] E.C.L.R. 263, 268; Waelbroeck, "Michelin II: A Per Se Rule against Rebates by Dominant Companies?" (2005) 1(1) *Journal of Competition Law & Economics* 149; Massimo Motta, "Michelin II--The treatment of rebates" in Bruce Lyons (ed), *Cases in European Competition Policy* (Cambridge, Cambridge University Press 2009), p.29; Gunnar Niels, Helen Jenkins, 'Reform of Article 82: where the link between dominance and effects breaks down' (2005) 26(11) E.C.L.R. 605

⁹ *Microsoft I: Microsoft (tying)* (Case COMP/C-3/39.530); *Microsoft II: Microsoft* (Case COMP/C-3/37.792) [2005] 4 CMLR 965 and *Microsoft (tying)* (Case COMP/C-3/39.530)

tying infringement against Microsoft. This allegation once again focused upon the tying of Microsoft's Windows operating system with what was allegedly another piece of software. In this instance, it was Microsoft Internet Explorer (IE); browser software used for browsing (or "surfing") the internet. In many ways the allegation was very similar to *Microsoft I*, yet there are two distinguishing factors which are particularly noteworthy. First, the tie concerned Windows and Internet Explorer rather than Windows Media Player. Second, instead of protracted (costly) court proceedings, the issue was resolved through commitments¹⁰ being offered by Microsoft and accepted by the Commission. It will be argued that the differences between media players such as Windows Media Player (WMP) and browsers like Internet Explorer mean that although there may well have been a foreclosure effect in *Microsoft I* there was so such foreclosure in *Microsoft II*. As a result while the Commission put forward a theory of foreclosure that was similar to *Microsoft I*, this theory of foreclosure did not apply on the facts of *Microsoft II*. However, while *Microsoft I* can be described as a good decision accompanied by a poor remedy, *Microsoft II* will be argued to be the reverse, a poor decision, but accompanied by innovative commitments that place little burden upon the dominant undertaking while still providing a beneficial effect on competition in the market. This is important as it shows that the Commission has learned from the mistakes that were made in crafting an appropriate remedy in *Microsoft I*.

Third, it will be shown once again, that the freedom of the consumer to choose the combination of products that most suits them is the driving force behind EU tying law, even in *Microsoft II*.

Fourth it will be argued that separate to the Commission's formal assessment of foreclosure, there is another form of foreclosure that is present in the decision. This author believes that while this is not articulated as a theory of foreclosure expressly, when the commitments decision is carefully analysed it is possible to see that the Commission is concerned with another subtle type

¹⁰ The concept of commitments is discussed below.

of foreclosure. This, the author has called “choice evasion”. This is a type of foreclosure only likely to be found in the software industry, where software undertakings are able to take advantage of unique characteristics present in the software market to undermine the consumers’ ability to perceive the alternative software options available to them and therefore make them less likely to exercise that choice.

Finally, it will be explained what undertakings can do to avoid tying litigation. First, by providing general guidance to those firms outside of the software market, then giving specific advice to dominant undertakings on software markets. This will explain that if dominant firms wish to avoid being investigated by the Commission they will need to ensure that they give consumers the option not to install their tied software, should highlight the differing functions of their integrated software and should require positive action from the consumer for the software to be activated/installed.

2.0 Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings

Since the *Microsoft I* decision, the Commission has released a communication giving guidance on its enforcement priorities when applying Article 102 of the TFEU to exclusionary conduct.¹¹ Since tying is an exclusionary conduct this has important implications for EU tying law.

It appears that part of the purpose behind issuing the guidance was to defend the Commission against accusations that its decisions lacked economic reasoning,¹² that it has pursued a formalistic approach, placing too much emphasis on the form of the conduct rather than the effect of the conduct¹³ and sought to protect competitors rather than competition.¹⁴ This can be seen where the Guidance discusses the purpose of the document:

“the Commission is mindful that what really matters is protecting an effective competitive process and not simply competitors. This may well mean that competitors who deliver less to consumers in terms of price, choice, quality and innovation will leave the market.”

¹¹ Commission Guidance (n 5)

¹² Christian Ahlborn, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 *Antitrust L.J.* 887, 904-905; J. Ratliff, "Abuse of Dominant Position and Pricing Practices--A Practitioner's Viewpoint" and D. Ridyard, "Article 82 Price Abuses--Towards a More Economic Approach" in C.D. Ehlermann and I. Atanasiu (eds), *European Competition Law Annual--What is an Abuse of a Dominant Position?* (Oxford: Hart Publishing, 2006); D. Waelbroeck, "Michelin II: A Per Se Rule against Rebates by Dominant Companies?" (2005) 1(1) *Journal of Competition Law & Economics* 149, 151.

¹³ Liza Lovdahl Gormsen, Why the European Commission's enforcement priorities on article 82 EC should be withdrawn (2010) 31(2) *E.C.L.R.* 45, 45; J. Kallaughner and B. Sher, "Rebates Revisited: Anticompetitive Effects and Exclusionary Abuse Under Article 82" [2004] *E.C.L.R.* 263, 268; Waelbroeck, "Michelin II: A Per Se Rule against Rebates by Dominant Companies?" (2005) 1(1) *Journal of Competition Law & Economics* 149; Massimo Motta, "Michelin II--The treatment of rebates" in Bruce Lyons (ed), *Cases in European Competition Policy* (Cambridge, Cambridge University Press 2009), p.29; Gunnar Niels, Helen Jenkins, 'Reform of Article 82: where the link between dominance and effects breaks down' (2005) 26(11) *E.C.L.R.* 605

¹⁴ Jurgita Malinauskaite, 'The development of "consumer welfare" and its application in the competition law of the European Community and Lithuania' (2007) 18(10) *I.C.C.L.R.* 354, 359

The Guidance is particularly useful as, in defending its position, the Commission has been forced to give details regarding the theoretical foundation of its approach to tying in a comparatively clear manner. Analysis of the Guidance yields four points of particular note in relation to tying and its theoretical basis:

1. confirmation that the restriction of customer choice determines the presence of a tie;
2. acknowledgement that tying is a common market phenomenon;
3. confirmation of the importance of economic theory in the Commission's assessments;
4. acknowledgement that protecting customer welfare is a primary aim.

2.1. Confirmation that customer choice determines the presence of a tie

First, it is important to state that the Commission guidance continues to hold the customers' freedom of choice as a defining characteristic of tying law. The Commission iterated that the customers' choice is a determining factor in assessing tying. It states that: "[e]vidence that two products are distinct" includes evidence that, "*when given a choice*, customers purchase the tying and the tied products separately from different sources of supply".¹⁵ It has been argued throughout the previous three chapters that the customers' freedom to choose the combination of products that suits them best is the driving force behind the law on tying and as such the restriction of this freedom is an essential element in determining the existence of a tie. This shows that the Commission still considers the preservation of customer freedom paramount in its approach to tying.

¹⁵ Commission Guidance (n 5) para 51

2.2. Acknowledgement that tying is a common market phenomenon

Second, the Commission accepts that tying and bundling are, not only common, but also intended to provide customers with better products in more cost effective ways.¹⁶ This appears to be an acknowledgement of the presence of tying in many markets, including competitive markets. It acknowledges that tying isn't inherently anti-competitive and that it can be used to bring benefits to consumers. This point seems to be in response to the criticism that was levelled at the European competition law enforcement authorities in relation to *Microsoft I*'s "separate product" test.¹⁷ As mentioned in the previous chapter, the wording of the test suggests that there are characteristics that make products objectively separate. This is not the case, and as a consequence the test was criticised, for apparently ignoring the fact that there were many markets where combinations of what could be considered "separate products" were sold together as a normal practice. Therefore the Commission appears to be distancing itself from the implication that all ties are anti-competitive.¹⁸ This is particularly useful development in light of the work of Evans and Salinger¹⁹ that demonstrated that in markets with very high fixed costs and very low marginal costs, such as software markets, it can lower firms' costs by providing software together and allowing the user to ignore the elements that they do not wish to use.

2.3. Confirmation of the importance of economic theory in the Commission's assessments

Third and most importantly, the Commission's Guidance demonstrates a deliberate attempt to incorporate economic theory into its policy and decision-

¹⁶ Commission Guidance (n 5) para 49

¹⁷ See Chapter Five and Jean-Yves Art, Gregory v.S. McCurdy, 'The European Commission's media player remedy in its Microsoft decision: compulsory code removal despite the absence of tying or foreclosure' [2004] 25(11) E.C.L.R. 694, 698; Hedvig Schmidt, 'Article 82: is technological integration checkmated?' [2009] 4 J.B.L. 354, 355

¹⁸ As argued in chapter 6 in order to avoid such criticism the Commission should have used the term 'separate customer demand' rather than 'separate products'. Notably customer demand is re-emphasised by the Commission in the guidance

¹⁹ David S. Evans, Michael Salinger, 'Why do firms bundle and tie? Evidence from competitive markets and implications for tying law' [2005] Yal.J. on Reg. 41

making. In conformity with previous decisions, there are references to Ordoliberal doctrine, for example: market power being the ability of a competitor to act appreciably independent of its competitors and customers; a concept established in case law and fundamentally Ordoliberal,²⁰ but there is another theory present which is of great interest. The Guidance contains a number of descriptions of Commission policy that strongly reflect the work of post-Chicago authors. In terms of general principles, the Commission states that it will take into account the specific facts and circumstances of each case.²¹ This alone does not prove a strong post-Chicago link, but it shows that the Commission will consider how the specific characteristics of each market affect each case. This is a further move away from assuming abuse exists *per se* as soon as a tie and dominance is established, continuing the trend iterated in *Microsoft I*.²² Further, the guidance appears to taking into account game theory based corporate behaviour. That is where undertakings make decisions based upon the likely behaviour and reactions of other market actors. The Guidance states that when predicting expansion or entry of a market it will take into account factors such as barriers to entry and expansion, risks and costs of failure and “the likely reactions of the allegedly dominant undertaking and other competitors”.²³ Again, while not conclusive, this consideration of market actors’ reactions to certain behaviour is characteristic of the post-Chicago school of thought.²⁴ These aspects of the Guidance are of a general post-Chicago character. Of even greater significance however are the following references that are far more identifiably post-Chicago in character: The Guidance states in reference to tying that the risk of anti-competitive foreclosure is expected to be greater where the dominant undertaking makes its tying strategy a lasting one, for example by tying in a manner that is costly to reverse.²⁵ Although there is no citation, this is based

²⁰ Commission, Guidance (n 5) para 10

²¹ *ibid* para 8, 9

²² Commission Decision Case COMP/C-3/37.792 *Microsoft*, para 841; *Microsoft (tying)* (Case COMP/C-3/39.530), para 34

²³ Commission Guidance (n 5) para 16

²⁴ Federico Etro, 'Competition Policy: Toward a new approach' (2006) 2(1) *Eur. Competition J.* 29, 33-34; David R. Bickel, *The Antitrust Division's adoption of a Chicago school economic policy calls for some reorganisation: but is the division's new policy here to stay?*, (1983) 20 *Hous. L. Rev* 1083, 1123.

²⁵ Commission Guidance (n 5) para 53

upon the work of the post-Chicago theorist M. Whinston.²⁶ Also the guidance explains that when two products can be used in variable proportions to a production process, increases in the price of one element may be avoided by customers if they can increase their use of the other product. In such a scenario, tying the two products together can allow the dominant undertaking to avoid this risk and raise prices.²⁷ This reflects the economic theory of harm established by Burnstein.²⁸ The Guidance also states that if there is a tie, and the tied product of that tie is an important complementary product for the customers of the tying product reducing the number of suppliers of that tied product through tying may make entry into that market more difficult.²⁹ It is argued that this concept mirrors the arguments made by Carlton and Waldman.³⁰ These specific references show that the Commission is listening to legal economic theorists, demonstrating that it is not “immune from the effects of economics”.³¹ Further, it also shows that the Commission is deliberately incorporating ideas from the post-Chicago school, using them to guide its hand and focus its attention on tying situations that are most likely to have anti-competitive effects. This confirms that the Commission intends to continue its di-theoretical approach, that is to say that the Commission continues to pursue Ordoliberal aims (customer freedom and market access) while using post-Chicago analysis to establish, for example, when market access is being hindered. This suggests that in future the Commission will attach much greater importance to economic analysis. The Commission will be looking to establish whether the tie in question corresponds to a known or new paradigm of market foreclosure. The post-Chicago references present in the Guidance are also important for another reason: Each tying decision that has been handed down by the Commission since *Microsoft I* relates to

²⁶ Michael D. Whinston, ‘Tying Foreclosure, and Exclusion’ (1990) 80 Am.Econ.Rev. 4 837

²⁷ Commission’ Guidance (n 5) para 56

²⁸ Meyer L. Burnstein, ‘A theory of Full-line forcing’ (1960) 55 Northwestern University Law Review 62, Burnstein is not a post-Chicago theorist, however his analysis based upon the specific characteristics of the market place (two products required in variable proportions in a production process, one of which is monopolised) reflects a similar method of assessment as post-Chicago scholars.

²⁹ Commission Guidance (n 5) para 58

³⁰ Dennis W. Carlton, Michael Waldman, ‘The Strategic use of tying to preserve and create market power in evolving industries’ (2002) 33 RAND.J.Econ 194

³¹ As suggested in: Christian Ahlborn, David S. Evans, ‘The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe’ (2008) 75 Antitrust L.J. 887, 904-905

software. Consequently, if considering only Commission and court decisions, it is difficult to establish whether the new di-theoretical approach applies only to the software market or more broadly to other more traditional markets as well. After all there are commentators that suggest that the software market and technically integrated products should be treated differently.³² The fact that the Commission's Guidance establishes and sets out no such distinction suggests that the di-theoretical approach is quite likely to apply to both software and non-software markets. Although it is perhaps likely that in traditional non-software markets in depth post-Chicago style analysis will be seen as less important. But the extent of this will remain unknown until further tying cases are pursued by the Commission and courts.

One final reason why the Guidance is of great importance is because it shows that this new di-theoretical approach is not limited to tying law alone. It is clear from the title of the Guidance³³ as well as the topics covered in its contents that it is intended to apply to Article 102 abuses generally. This shows that the di-theoretical approach is being applied to a wide range of anti-competitive behaviour and not just tying. However detailed consideration of how this is and may continue to occur is outside the ambit of this research.

³² David S. Evans, A Jorge Padilla and Michele Polo, 'Tying in Platform Software: Reasons for a Rule of reason Standard in European Competition Law' (2002) 25(4) *World Competition L.& Econ.Rev.* 509; Christian Ahlborn, David S. Evans, A. Jorge Padilla, 'The antitrust economics of tying: a farewell to per se illegality' (2004) 49 *Antitrust Bull.* 287, 339, in contrast to this see Samuel N. Weinstein, 'Bundles of trouble: The possibilities for a new separate-product test in technology tying cases' (2002) 90 *Californian Law Review* 903, 914-917

³³ Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02

2.4. Acknowledgement that customer welfare is still a primary aim

Fourth, the Guidance reinforces the point that protecting consumer welfare is a key aim.³⁴ The argument for measuring welfare by reference to consumer welfare rather than total aggregate welfare (the welfare of consumers and producers) was articulated by Salop, a post-Chicago theorist.³⁵ This further demonstrates that the Commission's approach is being informed and guided by post-Chicago economic thinking. This suggests that the Commission also favours post-Chicago analysis over the Chicago School's paradigms.³⁶

2.5. Impact of the Guidance

It is argued that the Guidance shows that the concerns of the Commission have remained the same: the Commission is still concerned with dominant undertakings interfering with customers' freedom and foreclosing the market to competitors. But what is new is the manner in which foreclosure is now being assessed. As seen in previous chapters³⁷ the Commission has previously avoided entering into detailed explanations of how a tie may hinder market entry or exclude competitors from the market, this can be expected to change. The Commission can now be expected to assess ties to find whether a credible theory of economic harm exists, before necessarily taking the matter further. What appears unclear at this stage is whether a credible theory of economic harm will be *required* before tying is established. Although a theory of economic harm was given in *Microsoft I* neither the Commission nor the Court stated that they were legally obliged to provide a theory of harm in order for the allegation to be made out.³⁸ It is uncertain whether the Guidance has changed this.

³⁴ Commission Guidance (n 5) para 19

³⁵ Steven C. Salop, 'Question: What is the real and proper antitrust welfare standard?' [2010] 22 Loy. Consumer L. Rev. 336

³⁶ That is not to say that there is a total rejection of Chicago School ideas. For example, the equally efficient competitor test (which relates to pricing based conduct rather than tying) was developed by Posner, a Chicago Scholar. Therefore, although less common, the Commission will take on Chicago School concepts where it considers it appropriate. See Richard Posner, *Antitrust Law* (Chicago, 2nd edn, University of Chicago Press 2001) 196

³⁷ See particularly Chapter 4

³⁸ *Microsoft* (Case COMP/C-3/37.792) [2005] 4 CMLR 965, 841; T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 1035

3.0 Commission decision Case COMP/C-3/39.530 – Microsoft tying 16/12/2009

The commitments decision³⁹ between Microsoft and the Commission is the first to be reached by the Commission since the publication of its Guidance. As a consequence it provides the first opportunity to assess how the Commission's approach to tying has changed and/or stayed the same in light of the Guidance. It will be shown here that the Commission continues to make greater use of economic theories of foreclosure and does not assume foreclosure is present simply because a dominant undertaking ties two elements together. It will also be explained that the Commission's formal theory of foreclosure in this decision does not take into account consumers' expectations of web page functionality.

3.1. Background

In December 2007 the Commission received a complaint from Opera Software ASA ('Opera'), a company based in Norway, which develops web browsers for various electronic devices, including PCs.⁴⁰ According to the complaint, Microsoft was tying Internet Explorer (a web browser) to Windows (an operating system). As a result of this, it prevented Opera's web browser from competing on the merits with Internet Explorer.⁴¹ The Commission initiated proceedings and adopted a statement of objections setting out its concerns.⁴² The final commitments were delivered on the 16th of December 2009.

3.2. Product markets

³⁹ Commitments are a relatively new way of dealing with objections. It does not involve a finding of abuse, but rather the dominant undertaking offers commitments that deal with the objections raised by the Commission. If accepted by the Commission these commitments become binding. See; Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 (now 101 and 102 TFEU) of the Treaty [2003] OJ L1/1, para 13, Article 9

⁴⁰ Microsoft (tying) (Case COMP/C-3/39.530), para 4

⁴¹ *ibid* para 5

⁴² *ibid* para 6

Like the first *Microsoft* decision, the *Microsoft II* commitments decision related to two product markets. The first was for PC operating systems which the Commission categorised as ‘system software’ that controls the basic functions of a computer. The second was for web browsers. Web browsers are used by individual users to access and interact with World Wide Web content. The content is hosted on computers connected by networks such as the internet. Web browsers enable users to access this information and navigate from one page to another easily.⁴³ The Commission listed⁴⁴ a number of other attributes that web browsers have before going on to conclude that “by reason of its specific characteristics and the lack of realistic substitutes, the market for web browsers ... constitutes a separate relevant product market”.⁴⁵

3.3. Practices raising concerns

The Commission took the preliminary view in its statement of objections that Microsoft was infringing Article 102 of the TFEU by tying its web browser Internet Explorer to its Windows operating system. The Commission restated the test articulated in the *Microsoft I* decision.⁴⁶ This test required that:

- (a) the tying and tied goods are two separate products;
- (b) the undertaking concerned is dominant in the tying product market;
- (c) the undertaking concerned does not give customers a choice to obtain the tying product without the tied product;
- (d) the tie is liable to foreclose competition.

Requirements (a) and (c) appear to have been dealt with in a single paragraph where the Commission merely states that it found Internet Explorer and Windows were separate products and that computer manufacturers and end users could not technically and legally obtain Windows without Internet Explorer.⁴⁷ Little explanation is given why this is the case. Which does nothing

⁴³ Microsoft (n 38) para 17-20

⁴⁴ *ibid* para 21

⁴⁵ *ibid* para 22

⁴⁶ *ibid* para 33

⁴⁷ *ibid* para 36

to clarify the ambiguity surrounding “two separate products” as left by the *Microsoft I* decision. This is unfortunate. What is considered in greater detail is the issue of foreclosure.

The Commission stated that in accordance with established case law it could normally assume the tying of a product with a dominant product led to *de facto* foreclosure. However, as in *Microsoft I*, the Commission chose to examine the effects of the tie more closely.⁴⁸ The Commission explained its theory of foreclosure, which was very similar to that which was used in the *Microsoft I* case.⁴⁹

3.4. The initial conditions giving rise to foreclosure

First the Commission stated that tying gave “Internet Explorer an artificial distribution advantage that other browsers were unable to match”.⁵⁰ This made Internet Explorer as ubiquitous as Windows.⁵¹ The Commission then went on to explain that there were two main ways for competitors to reach customers with their web browsers: distribution through Original Equipment Manufacturers (OEMs) and through internet downloads.⁵² The Commission considered that distribution through OEMs could not offset Internet Explorer’s ubiquity since this meant browsers could only be installed in addition to Internet Explorer rather than in place of it.⁵³ The Commission took the view that as long as Microsoft could ship Windows with Internet Explorer, OEMs faced negative incentives to bundle an additional web browser due to the additional costs associated with provision of additional software, such as support and testing costs.⁵⁴ Internet downloads were also considered not to offset the “artificial distribution advantage” of Internet Explorer being tied to Windows.⁵⁵ For example, the Commission highlighted issues such as overcoming users’ inertia to get them to change browser from that which was

⁴⁸ Microsoft (n 38) para 34

⁴⁹ *ibid* para 39-58

⁵⁰ *ibid* para 39

⁵¹ *ibid* para 40

⁵² *ibid* para 41

⁵³ *ibid* para 43

⁵⁴ *ibid* para 44

⁵⁵ *ibid* para 45

pre-installed,⁵⁶ and other more market specific issues such as the users being able to search, choose and install competing web browsers, which can be difficult if the users' lack the required skills, understanding or confidence to do so.⁵⁷ The Commission supported this supposition with market surveys.⁵⁸ These surveys stated that of all Windows users who had never or had only once downloaded a web browser, 31% said they did not know how to install or download software, 15% replied that they consider downloading or installing software as difficult or complicated, 8% fear security risks and 7% were not aware that they could download a web browser.⁵⁹ It should be borne in mind that while 7% is not a large proportion of Microsoft users, due to the magnitude of the absolute numbers involved this is still a significant number of users. The consumer survey was all the more stark in its findings. It reported that:

“84% of Windows users who use Internet Explorer as their primary web browser never use another web browser on their computer because they are unaware of the other options, or because they do not want to [download] or do not know how to download.”⁶⁰

This Commission felt that this indicated that consumers in particular needed further information on available web browsers before they would download. This raised the idea that Microsoft could maintain its market share for browsers by tying, even though their offering was an inferior product, because users were not able to, or confident enough or not aware of the opportunity to install other browsers.⁶¹

⁵⁶ An issue that arguably applies to most entrants in many markets.

⁵⁷ Microsoft (n 38) para 48

⁵⁸ *ibid* para 51-53

⁵⁹ *ibid* para 51

⁶⁰ *ibid* para 52

⁶¹ *ibid* para 54

3.5. Foreclosure through network effects

The following is the Commission's explanation of foreclosure.⁶² It will be argued later that this explanation is flawed and in fact Microsoft's tie of Windows and Internet Explorer was never likely to foreclose the market.

Step 1

Web content providers and software developers look to installation shares when deciding which browser they should develop web applications and content for.⁶³

Step 2

Content and software developers produce applications and content tailored to Internet Explorer due to Microsoft's tie making Internet Explorer present on around 90% of systems worldwide. Their choice of Internet Explorer as their preferred platform is not related to the merits of Internet Explorer itself *per se*, but rather based solely on its ubiquitous presence due to being tied to Microsoft's Windows.⁶⁴

Step 3

Although not expressly contained in the decision, it is also presumably the case that this provision of content and software means that customers find Internet Explorer more desirable, are more likely to use it and as such further reinforce the effect whereby software and content developers code primarily for Internet Explorer, knowing that it is the most popular browser. Thus, completing a feedback loop.

The view was taken that this limited innovation in web development.⁶⁵

⁶² the explanation of foreclosure was not set out in steps in the commitments decision, but has been here for ease of explanation

⁶³ Microsoft (n 38) para 55

⁶⁴ *ibid* para 56

⁶⁵ *ibid* para 56

3.6. Protecting Microsoft's position in the operating system market

The Commission also explained that part of the reason why Microsoft has been able to maintain its incredible dominance for so long is due to its “applications barrier to entry”. What this means is that users tend to buy Windows because there is so much software that is written for it. Any software developer that wrote a new operating system would have trouble selling it. This is because even if it was superior, those who bought the operating system would have to re-purchase all the software they already use, but in a format that works on their new system. In addition, many pieces of software may not even exist for a new operating system because no software developer is going to write software for an operating system that has a tiny market share, as the market for sales could only equal the size of the market share of that particular operating system. This application barrier makes it difficult for users to switch operating system and deters entry and therefore means there is little competition in the operating system market.

The Commission considered that the development of modern web applications poses a threat to Microsoft's operating system market share. Essentially, many of the software applications that users require in a computer can now be carried out over the internet through a web browser. That is to say, that instead of using a word processor that is installed on a computer itself, for example, users can log onto the web and access a word processor through the internet that is installed on a server. These applications can be accessed by the user regardless of the operating system being used on the computer. So a user could be running Windows or any other operating system such as Apple's OS or Linux and they could access the same programmes. This reduces the importance attached to which operating system a user installs and therefore reduces the applications barrier that protects Microsoft's Windows operating system. Instead users depend upon their web browser as a gateway to access these applications. Therefore the Commission believed that web browsers could pose a threat to Microsoft's dominance in the

operating system market⁶⁶ and did not want Microsoft to be able to restrict competition in this area through the use of the market power they still retained through their operating system.

The Commission took the view that through the use of tying, Microsoft “countered the perceived ‘platform threat’ from other web browsers because no application written specifically for Microsoft’s web browser ... would give its users an option to switch web browsers or even the underlying operating system”. In other words, if software and content providers wrote content just for Microsoft’s Internet Explorer, then this would require users to use Internet Explorer and as a consequence the only operating system that IE runs on: Microsoft Windows. This would protect Microsoft’s operating system market share.⁶⁷

3.7. The flaw in the Commission’s assessment of foreclosure

While *Microsoft I* can be said to have a cohesive theory of foreclosure but failed due to the implementation of a poor remedy, *Microsoft II* is the reverse. Its assessment of foreclosure was flawed even if the commitments required to be implemented were well chosen. As previously stated the concept of foreclosure envisaged by the Commission was that Web content providers and software developers would look to installation shares when deciding for which browser to develop web applications and content. Since Internet Explorer is tied to Windows these developers would tailor their applications and content to Internet Explorer because of its 90% market share around the world.

These arguments are similar to the concept of foreclosure articulated by the Commission and confirmed by the then Court of First Instance in the *Microsoft I* decision. There is however a fundamental difference between *Microsoft I* and *Microsoft II*, namely a difference between browsers and media players. Media players play content in a particular format. These formats are generally

⁶⁶ Microsoft (n 38), para 57

⁶⁷ Microsoft (n 38) para 58

not interchangeable. What will play on one player does not play on another media player. Consumers expected this as it has largely been the case since streaming media players began to be popular. The complete reverse is true of browsers and web content. HTML (Hyper Text Mark-up language) is the coding language used to encode webpages. It can be interpreted by any browser. Consumers expect their browser to be able to access any web-page.⁶⁸ As a consequence it is likely that if a user cannot access a web-page because it only works with one particular browser, the web-page will be considered inferior rather than the browser. Therefore the expectations of consumers are completely different. Media content has historically been coded in proprietary formats that only work with certain media players. In contrast, web-pages have been programmed to work with as many browsers as possible.

Further, there is another difference between media players and browsers. Suppose there is a computer user who uses Real Player media player. They are browsing the web and they come across content encoded in Windows Media Player format. When they click on it, the producer of that content is assured that even though the user generally uses Real Player, when they click on the content, Windows Media Player will pop up and load their content. Since 90% of computers run Windows, they are almost guaranteed the user can access their content. Now consider a similar situation in the context of browsers. There is a user who generally uses Firefox to surf the internet. They click on a link taking them to a web-page that is written so that it only works in conjunction with IE. Nothing happens. The web-page appears not to load properly. The user may just assume the host's server is not functioning correctly, that it is a badly programmed web-site or some other malfunction is occurring. What will not happen is IE automatically loading up and displaying the web-page. At best, a message will explain that the web-page is not compatible with the browser being used and the user should download IE. The user may look through their computer and find IE, copy the link into browser and look at the web-page from there, but the user is just as likely to

⁶⁸ The Commission noted that many existing web applications could be accessed on various browsers, see; Microsoft (tying) (Case COMP/C-3/39.530), para 57

bypass this process and just search for a similar web-page without having to switch browsers or give up completely.

The practical consequence of this is that Microsoft's attempts to create technical barriers to users switching web browser, and thus operating system, by providing a "reach"⁶⁹ incentive for content producers and software application developers to code "for" Microsoft IE,⁷⁰ were doomed to fail. This is because content developers would not want to risk excluding the 40% of internet users⁷¹ who used non-IE browsers. Without content developers gradually writing more and more web-pages and content that works exclusively with IE, there would never be any real foreclosure effect. Hypothetically, regardless of the percentage of users with IE installed on their computer, without web pages being written to run only on IE, there would be nothing to prevent a new entrant from releasing a new browser that would be compatible with the same percentage of the market as Microsoft's IE. Therefore if the new browser was technically superior and marketed effectively there would be no barriers to prevent people switching from IE to their new browser. Once again contrasting this with the situation in *Microsoft I*, if content producers did use Microsoft's proprietary WMP format to encode their content, then a new entrant to the media player market would be trying to promote a product that was unable to play all the content that was coded in WMP, and all other proprietary formats. If this was a high percentage, they would be foreclosed from the market. As such the situation regarding foreclosure was markedly different in *Microsoft I* to *Microsoft II* and as a result, it is argued that the theory of foreclosure given in *Microsoft II* was not a genuine risk.

⁶⁹ "Reach" here means the ability of an application or web content to reach the greatest number of possible customers

⁷⁰ It was noted by the Commission that programmes written for Microsoft IE would not function on other browsers; Microsoft (tying) (Case COMP/C-3/39.530), para 58

⁷¹ In December 2009, the same month as the commitments were published IE was used by 44.84% of European users, even earlier when IE's position was greater, in July 2008, 58.19% of European users used IE making the market share of non-IE browsers 41.81%, statistics from StatCounter: <<http://gs.statcounter.com/#browser-eu-monthly-200807-200912>> accessed 10/07/2014

One argument that was raised in the previous chapter in relation to Microsoft tying Windows and WMP was that since there was a single charge for both Windows and WMP, the cost of WMP was part of the price of Windows and therefore it may not have been fair for those who did not want to purchase WMP to be required to pay for its development. Does this argument also apply to the situation here with Windows and IE? No. Even if a user of Microsoft Windows does not want to use IE there is still a good reason for IE to be included. This is because, as the Commission noted, one of the main methods of distributing web browsers is through internet downloads.⁷² Therefore if Microsoft sold Windows without a web browser it would mean that users would be deprived of the very software necessary to download alternative browsers.⁷³ As a consequence, if a user only intends to use Microsoft IE once in order to download a new browser this alone is arguably sufficient justification for it being made available with Windows. As such, unlike in *Microsoft I*, the argument that users should not have to pay for Microsoft to develop software that they do not wish to use does not apply.

In light of this it is ostensibly very difficult to understand why the *Microsoft II* decision was necessary at all. Unlike *Microsoft I*, there was no foreclosure of the market and there were valid reasons for the inclusion of the browser. Further, unlike *Microsoft I* where it was by no means certain how the market would develop over the long term under the tying behaviour, the Commission was able to see from almost every available data source⁷⁴ that Microsoft's IE was losing market share to its rivals, not just in Europe, but around the world. This further suggests that there was either no foreclosure effect from the tie or that the foreclosure effects were so weak that they could not prevent Microsoft's web browser from losing market share.

⁷² Microsoft (n 38), para 46-47

⁷³ While it is possible to download web browsers without using a web browser, the method is complicated and far beyond the ability of most users.

⁷⁴ <<http://gs.statcounter.com/#browser-ww-monthly-200807-201309>> accessed 11/10/2013;
<<http://www.w3counter.com/trends>> accessed 11/10/2013;
<<http://marketshare.hitslink.com/browser-market-share.aspx?qprid=1&qpcustomb=0&qpsp=2008&qnp=6&qtimeframe=Y>> accessed 11/10/2013

4.0 The Commitments

The commitments offered by Microsoft and accepted by the Commission are of importance because they demonstrate that the Commission has learned from the failure of the *Microsoft I* remedy and is now using innovative and novel methods of bringing tying behaviour to an end and spurring competition in markets it considers to be subject to limited competition, such as the use of the choice screen. In complex software markets this is necessary as a simple requirement to make software available separately as well as tied may not be enough to undermine the restrictive effect of the tie.

4.1. General commitments

Under Article 9 of Regulation 1/2003 the Commission can accept and make binding commitments offered by a dominant undertaking under investigation to meet its concerns.⁷⁵ The following describes the commitments to which Microsoft agreed to be bound.

1. Microsoft enabled OEMs and end users to turn off and on Internet Explorer, when off, it would not be activated by any means other than the user choosing to turn it back on again;
2. OEMs would be free to pre-install any web browser/s of their choice and set them as default;
3. Microsoft would not use its productivity software or Windows update to distribute new versions of IE, unless IE was turned on;
4. Microsoft would not retaliate against any OEM for developing, using distributing, promoting or supporting software that competes with IE;
5. Microsoft would not enter into agreements granting consideration to an OEM for avoiding software that competes with IE; and,

⁷⁵ The Commission appears to be increasingly using Article 9 Regulation 1/2003 to quickly resolve competition concerns in a less confrontational manner.

6. Microsoft would not terminate a direct OEM licence without having first given written notice of the reasons for the proposed termination and at least 30 days to resolve those issues.⁷⁶

4.2. The Choice screen

In addition to this, the major commitment offered by Microsoft was that it would provide a “choice screen” for users. This would be a piece of software sent to computers in the European Economic Area running Windows through the Windows update mechanism. If the user had Microsoft IE set as the default web browser, it would display to the user two windows, one informing the user of the importance of web browsers and what they do, and a second giving the user the option of downloading one of twelve of the most popular browsers (by market share). The list of browsers would be updated every six months.⁷⁷ The list would be populated in accordance with market share, but the order of the browsers in the list would be randomised so as not to produce a bias in favour of those browsers in one particular position.⁷⁸

4.3. Reception of the decision

Microsoft II has received in many ways a positive response. Dolmans et al stated that the browser commitments were “very welcome developments” and sought to congratulate the Commission for its awareness in bringing the investigation, and its effort to resolve the issues in a co-operative and speedy manner.⁷⁹ Hobbelen and Jablan stated that the choice screen solution appeared to be satisfactory in their view. They opined that the solution would enhance consumer choice, innovation and competition.⁸⁰ However, Robinson argues that the Commission still paid too much attention to likely effects on

⁷⁶ Microsoft (n 38), Annex para 1-6

⁷⁷ Microsoft (n 38), Annex para 7-19

⁷⁸ *ibid* para 72(c)

⁷⁹ Maurits Dolmans, Thomas Graf, David R. Little, 'Microsoft's browser choice commitments and public interoperability undertaking' (2010) 31(7) E.C.L.R. 268, 274

⁸⁰ Hein Hobbelen, Joelle Jablan, 'Presentational issues in the Microsoft II case: fair chance for all browsers or a European Commission imposed advantage for existing market players?' (2011) 32(4) E.C.L.R. 206, 210

competition rather than actual.⁸¹ But he does not criticise the choice screen itself. So generally the concept of a choice screen in particular has been well received.

The criticism that does exist generally relates to the details of the commitments. For example, Dolmans et al focus on the lack of a monitoring system to ensure Microsoft was faithful in the implementation of the commitments.⁸² Hobbelen and Jablan and Aleixo⁸³ were more concerned with the number of browsers that were included in the choice screen.

Therefore while the *Microsoft II* commitments have been subject to scrutiny and some commentators have suggested that there are weaknesses, the basic concepts underlying the decision have generally met with approval. Further it is submitted by this author that this form of resolution is both intelligent and carefully balanced. It maximises the chance of users making a decision on the merits of the product rather than blindly accepting the default browser. It does so without using disproportionate solutions like “must carry” remedies that would cause problems such as requiring Microsoft to appear to be guarantors of the functionality and interoperability of other competitors’ programmes. Further this shows the Commission has learned from the failure of the *Microsoft I* decision’s remedies.

5.0 Customer Choice

The commitments decision remained true to the principle of customer choice. Like the case law before it, it is argued that the decision in *Microsoft II* was underpinned by a desire to uphold the primacy of the customer’s freedom to choose the combination of products that they deem best. The most obvious demonstration of this is in the name of the remedy itself, the customer *choice*

⁸¹ Jeremy Robinson, 'The Microsoft Browser Case: Why the Commission's Decision Fails to Convince' (2010) 1(4) J.E.C.L. & Prac 317, 318

⁸² Maurits Dolmans, Thomas Graf, David R. Little, 'Microsoft's browser choice commitments and public interoperability undertaking' (2010) 31(7) E.C.L.R. 268, 274; perhaps an insightful point in light of hindsight.

⁸³ Manuel Aleixo, 'An inaugural fine: Microsoft's failure to comply with commitments' (2013) 34(9) E.C.L.R. 466, 474

screen. But throughout the commitments decision, there are constant reminders that the aim of the decision is to ensure that the freedom of choice of the customer takes precedence, and is not manipulated by the dominant undertaking. This includes ensuring OEMs are able to ship Windows with “the browser of their choice”,⁸⁴ seeking to ensure users have a specific opportunity to choose their browser in a “technically straightforward environment”.⁸⁵ This, the Commission believed, would undermine the artificial distribution advantage held by Microsoft, facilitating competition on the merits and as a consequence “improving *choice* and encouraging innovation”.⁸⁶ In explaining the reason why the commitments were to extend for five years the Commission stated that this was the time necessary for users to inform themselves and “exercise *choice* and for those *choices* to have an impact on the market”.⁸⁷

When discussing potential review of the commitments it was stated that Microsoft or the Commission could request a review of the commitments two or more years after the adoption of the decision where either the market circumstances had changed fundamentally or the choice screen had manifestly failed to provide consumers with an *effective choice*.⁸⁸ Therefore it appears that the Commission would consider the commitments to have failed their purpose if they did not provide consumers with free choice. This gives a particularly clear display that the Commission’s aim was to provide consumers with freedom of choice.

Therefore it can be seen that throughout the commitments decision the concern of the Commission was to ensure that customer choice was not undermined by the artificial distribution advantage that it attributed to Microsoft’s tie. Its remedy was designed to reduce the impact of Microsoft’s dominance on the operating system market, by giving greater effect to the

⁸⁴ Microsoft (n 38) para 93; see also para 100

⁸⁵ *ibid* para 103

⁸⁶ Microsoft (n 38) para 104

⁸⁷ *ibid* para 112

⁸⁸ *ibid* Annex para 21

customer's choice and to allow that choice to influence the browser market driving greater competition and innovation.

This does not mean that the Commission was accurate in its initial assessment of the foreclosure threat, but it is important to highlight that the underlying aims of the Commission since the original *Microsoft I* decision (and earlier) have remained the same.

6.0 Choice evasion: An alternative source of foreclosure

So far it has been argued that while the motivation behind the Commission's *Microsoft II* decision was legally valid (the protection of customer choice) the assessment of foreclosure given by the Commission was not accurate. Due to the differences between media players and web browsers, Microsoft's tie would not cause a feedback loop that would foreclose other browsers. There is however another type of foreclosure that is tacitly expressed in the *Microsoft II* commitments decision that seems to be a far more convincing source of foreclosure. This novel type of foreclosure is what the author calls "choice evasion".

Choice evasion appears to have played a key part in the *Microsoft II* decision. This is where by not giving customers the option to install or uninstall the tied software, consumers remain unaware that there is any distinction between⁸⁹ the dominant software and the tied software in the first place. Consequently, the user is less likely to realise there are other alternatives because they do not realise that they are actually using two different types of software. This illusion means that customers do not realise they have a choice of applications and, as a result, they will not exercise it. They will be less likely to search out alternatives and pick a different, possibly superior software configuration. Hence the dominant company has evaded the customer's exercise of choice by hiding the fact that it exists.

While the term "choice evasion" is never used in the *Microsoft II* decision by the Commission, there is evidence that this was a key concern. When discussing, potential foreclosure effects, the Commission states "users are prevented from switching from Internet Explorer to competing web browsers ... due to the barriers associated with such a switch, such as

⁸⁹ This was part of Microsoft's original plan as expressed by Bill Gates himself in relation to their Window Media Player software: "an email sent to Mr Gates in January 1997 by Mr Bay, a Microsoft executive, in which the latter proposed to 'reposition [the] streaming media battle from NetShow vs. Real to Windows vs. Real' and to 'follow the [Internet Explorer] strategy wherever appropriate'. T-201/04, *Microsoft v Commission* [2007] ECR II-3601, para 911 (Netshow was the predecessor to WMP)

searching, choosing and installing such a competing web browser, which can stem from a lack of technical skills...”⁹⁰ As already mentioned, the Commission referred to surveys indicating that of all the Windows users who had never or had only once downloaded a web browser, 31% did not know how to install or download software, 15% replied that they consider downloading or installing software as difficult or complicated, 8% feared security risks and 7% were not aware that they could download a web browser.⁹¹ It would be interesting to know how many consumers did not fill in the survey because they did not understand what the terms meant. The consumer survey indicated that 84% of Windows users who use Internet Explorer as their main web browser never used another web browser on their computer because they are unaware of the other options, or because they do not want to or do not know how to download alternatives.⁹² This demonstrates a general lack of knowledge regarding browsers and the associated technologies. As such, the more Microsoft can blur the distinctions between Windows and IE, the less consumers will be likely to consider alternatives.

The commitments agreed between Microsoft and the Commission also demonstrate that the Commission was concerned about more than just ensuring Microsoft offered Windows without IE. If that was the Commission’s only concern all that would be required as a commitment would be for Microsoft to offer a version of Windows without IE. The Commission however appears to have learnt from the failure of Windows N⁹³ that resolving tying issues in software markets is far more complex than just offering the tying product alone at the same price. As such the Commission needed commitments that would not only provide Windows free of Internet Explorer but also overcome choice evasion. This is why Microsoft was required to, not only allow customers to turn IE off, but further to inform them about what a browser did and give them choices about which alternative browsers they could download. This would help overcome user lethargy and reverse choice

⁹⁰ Microsoft (n 38) para 48

⁹¹ *ibid* para 51

⁹² *ibid* para 52

⁹³ Windows N is the version of Windows without WMP integrated. See chapter 6 for further discussion on the Microsoft I remedy failure.

evasion by making users aware of the distinction between operating systems and browsers (like Windows and IE) in a safe, technologically unchallenging environment, rather than subtly hiding it.

The argument that choice evasion is at the heart of the Commission's software tying policy is also strongly confirmed by the most recent tying issue raised by the Commission that relates to Google.⁹⁴ Here the Commission is seeking to require Google to inform users when Google's own specialised search services are being displayed, and also to display alternative search providers on its web page when users make use of its specialised search services, such as for hotels, restaurants and flight services. This shows the Commission's concern that consumers should know when they are using a piece of software that provides a separate function and that they should be able to choose to access alternatives easily.

6.1.Rationale behind choice evasion

It is argued there are logical reasons for this particular type of foreclosure to be a unique concern within the tying law relating to software. These are as follows:

1. Software markets are characterised by high fixed costs and exceptionally low marginal costs. This is because the cost of programming a piece of software is very high but once programmed the cost of making a second copy is virtually £0.00 As a result there can be cost savings by tying software.⁹⁵ As a consequence it can be cheaper for a dominant undertaking to put their software together and charge the same price than to market and distribute each piece

⁹⁴ Commission 'Antitrust: Commission obtains from Google comparable display of specialised search rivals – Frequently asked questions' (MEMO/14/87) of 05/02/2014

⁹⁵ David S. Evans, Michael Salinger, 'Why do firms bundle and tie? Evidence from competitive markets and implications for tying law' [2005] Yal.J. on Reg. 41, 57-61

individually. This is rarely the case with normal traded goods such as cars or computers themselves;⁹⁶

2. Software markets are often subject to network effects, this means that having a wide distribution of client software can help capture further market share;
3. Software can often be programmed to be activated automatically. As such a user who does not want to use the software or was not even aware that the software was installed on their computer can find that the software activates itself when the user tries to access particular formats or inadvertently engages some other trigger mechanism (this reinforces the second element);
4. Users of software often have a limited understanding of how software works, little confidence in changing it and are unable to distinguish between various pieces of software and their functions. As a result of this they are less likely to be aware that there are competing goods that can perform the same functions as well as, or better than the software they already have. They are also less likely to make use of this software even if they know it exists if they are not confident in doing so.

This combination of characteristics can allow dominant undertakings to perform choice evasion: utilizing the characteristics above to minimise the chance that consumers will realise they have the choice to access various different versions of the software they are using, whilst capitalising on the network benefits that such a tie provides to make entry more difficult for competitors. It is quite possible that it is these concerns that have led the Commission to pursue the decisions against Microsoft that it has. It is also possible, that the Commission is only starting to discover this form of foreclosure due to the failure of its previous remedies, such as in *Microsoft I*,

⁹⁶ It is also these high fixed costs and low marginal costs that it very difficult to accurately assess the value of a piece of software, making it difficult for competition authorities to assess how much an “untied” piece of software should cost compared to the price of the tie.

and this explains why the Commission has not yet articulated the threat clearly; it is only just learning of its existence. Nonetheless, it appears that by carefully examining the particular characteristics of each market in a post-Chicago style of analysis, the Commission is learning how to spur competition in software markets and through “trial and error” the Commission is learning how to craft remedies (or commitments) that are better suited to this aim.

7.0 The Commission's policy on tying: into the future

What can be expected from the Commission's tying policy approach in future? It is argued that what is clear is that the Commission will be targeting ties made by dominant undertakings where it sees the consumers' freedom to choose their preferred combination of products under threat and, where there is the possibility of foreclosing the market in so doing. In order to predict when this is a particular threat, the Commission will analyse the behaviour of the undertaking within the context of that particular market. Commission decisions are likely to contain increasing use of surveys to ascertain what behavioural responses other market actors would be likely to pursue as a result of the tie. Post-Chicago economic theories are also going to be studied carefully by the Commission and used to assess if a dominant undertaking is using tying to exclude competitors or make entry more difficult. The Commission will not depend solely on established post-Chicago theories, but will be looking to evaluate each alleged instance of tying within the circumstances present to see whether there is a likely exclusionary effect.

7.1.Compliance: Avoiding tying litigation in non-software markets

In the vast majority of cases avoiding the Commission's disapproval will be relatively simple. Even if it will be difficult to predict what the Commission considers to be foreclosure, a simple focus on aspects (a) and (c) of the following requirements would alleviate any doubt:

- (a) there is independent demand for the tying and tied goods;
- (b) the undertaking concerned is dominant in the tying product market;
- (c) the undertaking concerned does not give customers a choice to obtain the tying product without the tied product;
- (d) the tying is liable to foreclose competition

Simply put, an undertaking seeking to avoid litigation should always ensure there is the option to buy goods separately while there is still independent

customer demand. Even if it appears that in a short period of time there will be demand for only one combined product, a dominant undertaking should make both available until consumer purchase patterns have changed. That is to say; customer purchase patterns should lead undertaking supply patterns, not the other way around. This way consumer demand will govern what products are available and customer choice will not be impeded. This may require offering “legacy” products for a short time, but if consumer patterns really do change, this should not be required for too long, and if they do not change then this means that costly litigation has been avoided.

7.2.Avoiding litigation in software markets: evading choice evasion

As stated in the last section, generally if a dominant undertaking makes their products available independently for as long as independent customer demand exists, they will be able to ensure compliance with Article 102 TFEU and avoid tying litigation. The exception to this rule is the software market. In the software market avoiding tying litigation is more complicated.

The choice evasion threat is based on tying software so that it is installed without users’ knowledge or request, and is called upon automatically without the user needing to select that program for installation. It capitalises on the users’ ignorance of software distinctions and alternative programmes. Therefore, while in most industries, the dominant undertaking should make their goods available separately if they want to avoid infringing the law on tying, software must be treated differently. While a dominant software undertaking can take advantage of distribution efficiencies *etc.* by providing software together, it should not seek to exploit the ignorance of users/consumers in this fast moving sector. Rather when providing two or more pieces of software together a dominant software undertaking should always ensure that they:

1. Provide users with the choice not to install/activate their additional software;

2. Require the user to make a positive/active choice for the software to be installed, such as ticking a box or re-entering a CD (a default ticked box will not suffice);
3. Inform users accurately of the purpose, generic term for and utility of their software at the time the choice is made;
4. Inform users that the software is separate and explain that separate function;
5. Prevent the software from being started automatically unless the consumer chooses to activate/install their software.

The purpose of this is:

- Point 1 gives customers a choice;
- Point 2 highlights that choice;
- Point 3 and 4 informs the customer so that they are able to make that choice and search for alternatives in they desire;
- Point 5 gives effect to that choice and prevents network effects from causing foreclosure in markets subject to these effects.

If these steps are followed, it is likely that the Commission will find that the consumer has made an informed choice to accept the additional software. As such the undertaking can demonstrate that it has not taken advantage of the user's lack of understanding, or tied the products in such a fashion as to convince the user that the software cannot be acquired separately from other providers with differing features and differing attributes and therefore has not prevented consumer demand developing or prevented consumers from exercising their freedom of choice. Also since the installation is contingent on the consumer making an active decision, it is likely to reduce any foreclosure of markets subject to network effects since it is not guaranteed that every user will install/activate the additional software. The only further aspect that the Commission is likely to be concerned with is customers' knowledge of competing products.

What can be seen then is where a dominant software firm follows each of these five points it less likely to be found to contravene Article 102 TFEU and where an undertaking does not follow these points it will be more likely to be found to contravene Article 102 TFEU.

8.0 Conclusion

This chapter demonstrates by reference to the Guidance and *Microsoft II* two main themes. First the Commission is, as it has been before, concerned with the preservation of customer freedom and their ability to choose the products that they want and that suits them best. Second it has been shown that the Commission is integrating post-Chicago models, and post-Chicago style economic analysis into its assessment of foreclosure. This is moving it away from a *per se* assumption of foreclosure as soon as it is established that a dominant undertaking has tied two products that customers would rather source separately, and moving it towards finding a tie only after an applicable theory of economic harm has also been established. This is likely to make findings of abuse less predictable and also require far greater economic assessment, such as business and consumer surveys, as the Commission seeks to consider what impact a tie will have on the behaviour of consumers, competitors and other market actors. What remains the same is that any behaviour that is found to directly or indirectly inhibit the ability of customers to choose technically superior products will not be viewed likely by the Commission.

The Commission's remedies and commitment decisions have and are going to continue in future to aim to increase the ease with which customers are able to recognise and execute their freedom of choice. It has been argued that this is because the Commission is concerned with a particular type of foreclosure in software markets. While not articulated as the formal theory of foreclosure it has been argued that the Commission's concern with choice evasion is key to understanding its behaviour in pursuing dominant software undertakings and as a consequence it is key to understanding how such undertakings can avoid being penalised. Firms that are dominant in the software market will need to take special considerations into account in order not to be found to foreclose the market. This includes ensuring that they give consumers the option not to install their tied software, highlighting the differing functions of the software and requiring positive action from the consumer for the software to be activated or installed.

This all shows that the Commission is, both in its Guidance and in practice, incorporating post-Chicago theory into its tying assessment to support and preserve customer choice and market entry. The Commission is willing to consider the specific characteristics of a market, such as software, and analyse what causes customers' freedom to be curtailed or competitors excluded in that particularly market and act accordingly. It is also starting to create remedies (or accept commitments) that deal with these issues in novel ways that again take into account the nature of the market and the impact the remedies are likely to have in practice. The consequence of this is that dominant undertakings, particularly in software markets, need to understand the Commission and courts' methods and aims and adjust their behaviour in order to ensure that market entry is unrestricted and customers' freedom protected.

Conclusion

This thesis, through the use of qualitative methods, has assessed the economic foundations of the EU approach to tying. This analysis has yielded an explanation of how the EU approach has changed since its inception to the present. It offers a new interdisciplinary account of how the prohibition of tying came into EU law and how it has changed through three particular periods. The results of this assessment have allowed the author to provide guidance, not just on how the law has been interpreted, but predicting the way the law will be applied in future.

Through the comparison of three leading schools of thought on competition/antitrust analysis, this thesis has explored the European Commission and Union courts' approach to tying. This has shown that the decisions and judgments contain statements that are antithetical to the Chicago School approach. Rejecting accepted tenets of the Chicago School's adherents, the decisions and judgments follow practices that are either informed by or, at the very least, reflect a strong Ordoliberal influence. The strongest element of this that relates to tying law is the aim of upholding customer choice. This theme runs through the all three periods discussed and consequently continues to play a primary role within tying law. However, this is not the only economic theory that has influenced the Commission and Union courts. While it is argued that ordoliberalism was the only economic theory that informed the aims and application of EU tying law in the first period, the second and third periods, namely the *Microsoft I* and *post-Microsoft* periods, a secondary supporting influence is present. It is argued in this thesis that during the second and third periods, the Commission's application of the law has been informed and directed by post-Chicago thinking. This has not supplanted the primacy of Ordoliberal theory within the Commission's thinking, but rather it has become a tool that has aided the Commission in determining when the aims, established by Ordoliberal theory, are most likely to be under threat. The introduction of post-Chicago theory has honed and sharpened the Commission's approach leading to a more economically grounded assessment of when competition will or will not be likely to be restricted by a particular conduct on a particular market by an undertaking in a dominant position.

Chapter one has explored the development of tying law in Germany. Its contribution to the thesis is twofold; first it establishes how tying law developed in Germany and second it sets out Ordoliberal economic theory and analyses how it made the

transition from esoteric economic theory to German law, and ultimately to the original EEC Treaty. Establishing the source of EU tying law is of great significance as it allows greater understanding of the Commission's decision and the jurisprudence of the EU courts. It allows judgments to be evaluated by their own standard, in asking whether they accomplish what they are theoretically intending to achieve. Further understanding the theory behind the decisions allows the theory itself to be assessed from an economic perspective. Therefore implementing a historic legal approach has provided an analysis of the impact of Ordoliberalism in the foundation and formation of EU tying law.

Chapter two has considered the Chicago School of thought. It has set out the most relevant aspects that relate to tying and the economic justification behind the position. The position of the Chicago School on the restriction of competition, tying and their approach to issues such as barriers to entry¹ have been explained. This chapter provided a foundation for later chapters where the Chicago School theories are compared with the EU approach to tying. In later chapters, the views of the Chicago School are also used to critique the approach of the EU competition enforcement authorities.

In chapter three, the work of the post-Chicago School has been considered and the post-Chicago economic theories that have been established since 1990 have been expounded. These theories are not general or broadly applicable to all markets; rather the chapter sets out the models that have been used to show that tying can indeed lead to negative competitive effects in specific circumstances. This chapter has also set out the post-Chicago view of the measure of efficiency, again this is pertinent for later chapters where it is necessary to understand both the models of harm and the measure of efficiency that post-Chicago espouses in order to compare this with the EU approach itself. It has also been argued in this chapter that the accuracy of these theories is generally accepted.²

¹ The views of the Chicago School are represented as they were before 1990. This time frame is important as it presents an opportunity to consider whether this School of thought was influential within Commission and the courts' decisions before post-Chicago economics began to impact the way economists viewed tying and its risk of competitive harm.

² That is not to say that these theories are without criticism, instead such criticism tends to centre on whether they can be applied in court, rather than whether they are economically valid.

Chapter four starts the qualitative analysis of the decisions of the Commission and the Union courts. This chapter has studied the period from the very first tying decisions issued within the EU jurisdiction, to 2004; the mono-theoretical period. Through careful and thorough analysis, this research has found that the Commission and Union courts, during this period, have pursued a tying policy that has focused on the preservation of customer freedom. This aim is based on the belief that the customer is in the best position to choose the combination of products that they prefer and that to hinder that choice restricts competitors' access to the market. In terms of establishing the economic theory that informs the law on tying; customer freedom is a concept that is highly prized within Ordoliberal thinking. This analysis is a significant contribution to the present state of knowledge. It provides further evidence that tying theory in the EU has been strongly influenced by Ordoliberal thinking. Aside from customer freedom, the chapter further argues that a number of other concepts present in EU competition law are also consonant with Ordoliberal theory. It also shows that there are economic arguments that have been rejected and other arguments that have been accepted by the Commission and Union courts that are contrary to the thinking established by the Chicago School of thought, demonstrating that Chicago School thinking has not had a significant impact on the execution of EU tying law.

Chapter five uses the case of *Microsoft I* as a watershed to demonstrate the emergence of a di-theoretical period. This is where through the express inclusion of a foreclosure requirement the Commission and Union courts begin to adopt a market by market approach where they seek to not only establish a tie but further assess whether the tie will have anti-competitive effects in that particular instance. This, the author has argued, is the start of a new period where the aims of the EU courts are still Ordoliberal in nature (with aims such as customer freedom and exclusion of competitors), but the way in which these aims are pursued begins to require the presence of credible economic theories of harm. It is significant that the manner in which economic theories of harm are proffered by the Commission is not dissimilar to the style of the post-Chicago authors considered in chapter three. This is a significant contribution to the broader debate that has been taking place between

commentators such as Gerber,³ Akman,⁴ Warlouzet⁵ and others⁶ regarding the theoretical inspiration and foundation of EU competition law.

The chapter has also made a normative argument based on the test articulated in the *Microsoft I* decision. This related specifically to the “separate products” element of the test. The author has argued that while this is technically in keeping with the prior case law on tying, it is flawed in that it misdirects attention from the importance of customer demand. Customer demand is important because it expresses how customers chose to purchase their products when freely able to do so. By concealing the importance of customer demand this obscures the fundamental aim of protecting customer freedom. Therefore, in this thesis, it is argued that the legal test, while with technically accurate, was articulated in an unhelpful manner and a new test has been proposed which provides greater clarity.

Chapter six also focused on the *Microsoft I* decision. This chapter first set out the substantive economic failure of the *Microsoft I* remedy. Through economic analysis it has been reasoned that two particular factors that relate to the price structure and the integration costs of the media player market are responsible for this failure. The chapter then provides a number of normative proposals to illustrate how the Commission could have sought to resolve the tie. This normative discussion provides insight into both the advantages and disadvantages of each possible remedy and sets out a novel remedy that is inspired by Ordoliberal theory and its aims. This contributes to the thesis by demonstrating that the failure of the *Microsoft I* is a consequence of the remedy failing to take into account particular market specific issues that arose on the facts, not necessarily a flaw in the law or its application. It has further provided new types of potential remedies that are more nuanced and market specific than those that have been traditionally associated with tying. It is argued that these innovative models are more suited to achieving

³ David J. Gerber, *Law and Competition in Twentieth Century Europe, Protecting Prometheus* (first published 1998, OUP 2001)

⁴ Pinar Akman, ‘Searching for the long-lost soul of art.82 EC’ (2009) 29 OJLS 267; see also Pinar Akman, Hussein Kassim, ‘Myths and Myth-Making in the European Union: The Institutionalization and Interpretation of EU Competition Policy’ (2010) 48(1) *Journal of Common Market Studies* 111

⁵ Laurent Warlouzet, ‘The Rise of European Competition Policy, 1950-1991: A Cross-Disciplinary Survey of a Contested Policy Sphere’ EUI Working Paper RSCAS 2010/80

⁶ K. K. Patel, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013)

compliance with Article 102 (d) TFEU, in particular the final two remedies⁷ are most favoured. These require either: the installation of a media player choice screen with each Windows installation, or the dominant undertaking to act “as if” subject to competition, which in this present situation would require Microsoft to integrate WMP with only 20-33% of the copies of Windows sold.

Chapter seven considered the period after *Microsoft I* until the present. This again has been shown to be a di-theoretical period. This chapter has investigated the Guidance and the tying decisions that have been issued by the Commission during this period. The chapter has made two major contributions to the thesis. The first contribution is to establish that the Guidance given by the Commission has made deliberate allusions to post-Chicago models of anti-competitive tying when explaining how it will prioritise the pursuit of tying arrangements. This provides strong evidence of the Commission incorporating post-Chicago analysis into its approach, so that it not only follows a post-Chicago style of analysis (as in *Microsoft I*), but moreover actually takes established post-Chicago models of competitive harm into account when assessing when the risk to competition is greatest. The second contribution has been to establish, through the assessment of the tying decisions that have been made during both the mono- and the di-theoretical periods, that the Commission has two modes of analysis in tying law. The first is already established and essentially seeks to make products available separately if customers desire to purchase them independently. The second mode applies only to the software industry. This mode of analysis is based on what the author has called “choice evasion”. By isolating the true concerns of the Commission, the chapter gives a new explanation of the theoretical reasoning behind the Commission’s tying decisions in the software industry. This new theory has also provided the basis for defining behaviour that will be caught by the Commission. From this, guidance to dominant software undertakings has been given that provides software firms with clear direction on the behaviour they must avert if they wish to avoid competition scrutiny, litigation and the associated substantial fines and/or claims for damages.

⁷ Altogether the remedies considered include; Microsoft: 1. Must not carry Windows Media Player; 2. Must not integrate Windows Media Player; 3. Must only carry a basic version of Windows Media Player; 4. Must carry a/multiple competitors’ media players; 5. Must not cross subsidise Windows Media Player; 6. Must offer a screen choice; 7. Must behave ‘as if’ subject to competition.

This thesis constitutes a historical and economic analysis of EU competition tying law. Its contributions are to explain how tying entered into EU competition law, to identify the economic theories that informed it, to trace how the developing state of economic knowledge has altered the application of the law, and finally to demonstrate how this law has been applied and how it is likely to be applied in the near future, particularly with regard to the software market.

This author has identified further research on this topic that could be carried out, but which is beyond the ambit of this thesis. There are two specific pathways that merit investigation. The first relates to the state of knowledge of Ordoliberalism. Many of the concepts expounded by the Ordoliberal school are not well known and it would be beneficial, particularly for those in the Anglo-sphere of competition studies to have access to detailed assessment of the Ordoliberal principles. This would help in the identification of these principles in other areas of EU competition where they may be present. This would lead to further benefits akin to those of the present research, such as providing dominant undertakings, law firms and judges with a better understanding of the economic theory upon which EU competition law is and was originally based. It would provide them with greater understanding of the aims of EU competition law. This would provide commentators, such as academic lawyers and economists, with a greater understanding of why the law is applied in the manner it is and consequentially this will make it easier for them to assess whether the law is achieving or failing to achieve those aims, allowing them to propose improvements where necessary.

The second aspect relates to the empirical confirmation of certain concerns associated with tying, specifically, empirical research to demonstrate whether dominant undertakings use tying to exclude competitors from markets closely related to their primary market. It has already been established⁸ that if two products are tied it can make market entry more difficult by forcing competitors to enter both markets at the same time. But separately the argument has been made that by tying two products (one dominant, one competitive) and excluding competitors that make the competitive element, an undertaking can protect its primary market, the aim being to

⁸ See Dennis W. Carlton, Michael Waldman, 'The Strategic use of tying to preserve and create market power in evolving industries' (2002) 33 *RandJEcon* 194

make it less likely that they will enter their primary, dominant market in future. This appears to be based on the assumption that an undertaking on a neighbouring market is more likely to enter the dominant undertaking's primary market than an undertaking from an unrelated market. If it is empirically established that market entry is more likely to come from competitors based on closely related markets as opposed to those that are unrelated, this would suggest that there could be an anticompetitive benefit to be achieved by dominant undertakings excluding competitors in related markets even if they do not increase prices in the short term. Rather such behaviour would be intended to preserve the monopoly price of their dominant good/service in the long term. This research would also be of great value to those seeking to understand the anticompetitive benefits that can be obtained through the use of tying, and as a consequence provide further guidance and economic direction to enforcement authorities regulators and courts seeking to maintain competition in the market.

Bibliography

Books

Allen C 'Ordo-Liberalism Trumps Keynesianism in the Federal Republic of Germany' in Bernard Moss, (ed), *Monetary Union in Crisis: The European Union as a Neo-Liberal Construction* (London, Palgrave 2005)

Biedenkopf K, *Vertragliche Wettbewerbsbeschränkung und Wirtschaftsverfassung, Die Ausschließlichkeitsklausel als Beispiel* (Heidelberg, Recht und Wirtschaft 1958)

Bilger, Francois, *La Pensée Économique Libérale dans L'Allemagne Contemporaine* (Paris, R. Pichon et R. Durand-Auzias 1964)

Bork R, *The Antitrust Paradox* (New York, The Free Press 1978)

Böhm F, 'Die Forschungs-und Lehrgemeinschaft zwischen Juristen und Volkswirten an der Universität Freiburg in den dreißiger und vierziger Jahren des 20. Jahrhunderts. (Das Recht der Ordnung der Wirtschaft)' in Hans Julius Wolff (ed), *Aus der Geschichte der Rechts- und Staatswissenschaften zu Freiburg i. Br.* (Freiburg, Albert 1957)

Böhm F, *Die Ordnung der Wirtschaft als geschichtliche Aufgabe und rechtsschöpferische Leistung* (Stuttgart and Berlin, W. Kohlhammer 1937)

Erhard L, 'Gestern-Heute-Morgen' in K. Hohnmann (ed), *Gedanken aus fünf Jahrzehnten* (Düsseldorf, Econ 1988)

Eucken W, *The Foundations of Economics* (William Hodge, first published in English 1950)

Eucken W, 'Wettbewerb als Grundprinzip der Wirtschaftsverfassung' in Schmölders, G. (ed.), *Der Wettbewerb als Mittel volkswirtschaftlicher Leistungssteigerung und Leistungsauslese* (Berlin, Duncker & Humblot 1942)

Eucken W, *Foundations of Economics, History and Theory in the Analysis of Economic Reality* (William Clowes & sons 1950)

Eucken W, 'The Social Question' in, *Standard Texts on the Social Market Economy. Two Centuries of Discussion* (edited by Ludwig-Erhard-Stiftung Stuttgart, New York 1982)

Geradin D, Dr Anne Layne-Farrar, Nicolas Petit, *EU Competition Law and Economics* (Oxford, OUP 2012)

Gerber D, *Law and Competition in Twentieth Century Europe, Protecting Prometheus* (first published 1998, OUP 2001)

Grossmann-Doerth H, *Selbstgeschaffenes Recht der Wirtschaftsordnung und staatliches Recht* (Freiburg i.B., 1933)

Goyder D, *EEC Competition Law* (1st edn, OUP, 1988)

Goyder D, *EC Competition Law* (2nd edn, OUP, 1993)

Goyder D, *EC Competition Law* (3rd edn, OUP, 1998)

Hayek F, 'The Rediscovery of Freedom: Personal Recollections' in Peter G. Klein (ed), *The Fortunes of Liberalism, vol 4 of The Collected Words of F.A. Hayek* (Chicago, University of Chicago Press 1992)

Hovenkamp H, *Federal Antitrust Policy: The Law of Competition and its practice* (3rd edn, Thomson/West, 2005)

Jansen U, *Die Kopplungsverträge im Recht der Wettbewerbsbeschränkungen* (Band 5, Bad Homburg, Gehlen 1968)

Jones A, Sufrin B, *EC Competition Law* (4 edn, OUP, 2010)

Miksch L, Die Wirtschaftspolitik des Als Ob' 105 Zeitschrift für die gesamte Staatswissenschaft (1949) 310.

Miksch L, *Wettbewerb als Aufgabe: Grundsätze einer Wettbewerbsordnung* (2ed, Godesberg 1947)

Monnet J, *Memoirs* (Knopf Doubleday Publishing Group, 1978)

Motta M, "Michelin II--The treatment of rebates" in Bruce Lyons (ed), *Cases in European Competition Policy* (Cambridge, Cambridge University Press 2009)

Müller-Armack A, *Auf dem Weg nach Europa, Erinnerungen und Ausblicke. Tübingen* (Translated by the CVCE, Stuttgart, Rainer Wunderlich, C.E. Poeschel 1971)

O'Donoghue R, Jorge Padilla, *The Law and Economics of Article 102 TFEU* (Oxford, 2nd edn, Hart Publishing 2013)

Patel K, H Schweitzer (ed), *The Historical Foundations of EU Competition Law* (OUP 2013)

Peacock A, and H. Willgerodt, (eds), *Germany's Social Market Economy* (London, Macmillan 1989)

Peck J, *Constructions of Neoliberal Reason* (Oxford, OUP 2010)

Posner R, *Antitrust Law* (Chicago, 2nd edn, University of Chicago Press 2001)

Ratliff J, 'Abuse of Dominant Position and Pricing Practices--A Practitioner's Viewpoint' C.D. Ehlermann and I. Atanasiu (eds), *European Competition Law Annual--What is an Abuse of a Dominant Position?* (Oxford, Hart Publishing 2006)

Ridyard D, 'Article 82 Price Abuses--Towards a More Economic Approach' in C.D. Ehlermann and I. Atanasiu (eds), *European Competition Law Annual--What is an Abuse of a Dominant Position?* (Oxford, Hart Publishing 2006)

Risenkampff A, Joachim Gres, *Gesetz gegen Wettbewerbsbeschränkungen (Law Against Restraints of Competition)* (Köln, Verlag 1977)

Rittner F, *Die Ausschließlichkeitsbindungen in dogmatischer und rechtspolitischer Betrachtung* (Düsseldorf, Verl. Handelsblatt 1957)

Scherer F, *Industry Structure Strategy and Public Policy* (HarperCollins College Publishers 1996)

Scherer F, 'International Trade and Competition Policy' in Einar Hope, Per Maeleng (eds), *Competition and Trade Policies: Coherence or conflict?* (Routledge 1998)

Schmidt H, *Competition Law, Innovation and antitrust* (Cheltenham, Edward Elgar 2009)

Stigler G, *The organisation of industry* (University of Chicago Press 1968)

Sullivan L, Warren S. Grimes, *The Law of Antitrust: An integrated handbook* 9-10 (2nd ed. 2006)

Walker F, *Political Economy* (3rd ed 1888) 263

Wegmann M, *Der Einfluss des Neoliberalismus auf das Europäische Wettbewerbsrecht 1946-1965, Von den Wirtschaftswissenschaften zur Politik* (Baden-Baden, Nomos 2008)

Whish R, *Competition Law* (6th edn, OUP 2009)

Williamson O, 'Williamson, Book Review' (1974) 83 Yale L.J. 647, 656-59

Journals

—— Case comment on *EEC v IBM* [1984] 3 CMLR 147 (CEC) (1986) 11(1) E. L Rev. 91

—— (Case comment) Article 86 – tying obligations (1988) 9(1) E.C.L.R 19

Ahlborn C, Carsten Grave, 'Walter Eucken and Ordoliberalism: An Introduction from a Consumer Welfare Perspective' (2006) 2 CPI 2 Autumn 198

Ahlborn C, David S. Evans, A. Jorge Padilla, 'The antitrust economics of tying: a farewell to per se illegality' (2004) 49 Antitrust. Bull 287

Ahlborn C, David S. Evans, 'The Microsoft Judgement and its implications for Competition policy towards dominant firms in Europe' (2008) 75 Antitrust L.J. 887

Akman P, 'Searching for the long-lost soul of art.82 EC' (2009) 29 OJLS 267

Akman P, Hussein Kassim, 'Myths and Myth-Making in the European Union: The Institutionalization and Interpretation of EU Competition Policy' (2010) 48(1) Journal of Common Market Studies 111

Albors-Llorens A, 'The role of objective justification and efficiencies in the application of article 82 EC' (2007) 44(6) Common Market Law Review 1727

Aleixo M, 'An inaugural fine: Microsoft's failure to comply with commitments' (2013) 34(9) E.C.L.R. 466, 474

Alexiadis P, European Court of Justice: competition laws – tying agreements
1992 14(5) EIPR D102

Art J, Gregory v.S. McCurdy, 'The European Commission's media player
remedy in its Microsoft decision: compulsory code removal despite the
absence of tying or foreclosure' [2004] European Competition Law Review
694

Ayres I, Barry Nalebuff, 'Going Soft on Microsoft? The EU's Antitrust Case
and Remedy' (2005) 2(2) The Economists' Voice 6 (article 4)

Baker J, Recent developments in economics that challenge Chicago School
views (1989) 58 Antitrust L.J 645, 652

Bickel D, 'The Antitrust Division's adoption of a Chicago School economic
policy calls for some reorganisation: but is the division's new policy here to
stay?' (1983) 20 Hous. L. Rev. 1083, 1088

Blake H, William K. Jones, In Defence of Antitrust, (1965) 65 Colum. L. Rev.
377

Bonfeld W, 'Freedom and the Strong State: On German Ordoliberalism'
(2012) 17(5) New Political Economy 633, 647-651

Bork R, 'Emerging Substantive Standards-developments and need for change'
(1982) 50 Antitrust L.J. 179, 181

Bork R, Emerging Substantive Standards-developments and need for change,
(1982) 50 Antitrust L.J. 179, 181

Bowman W, 'Tying arrangements and the leverage problem' (1957-1958) 67
Yale L.J. 19, 20

Brams S, 'Applying game theory to antitrust litigation' (1978) 18 *Jurimetrics J.* 320

Brodley J, 'Post-Chicago Economics and Workable Legal Policy' [1995] 63 *Antitrust L. J.* 683

Brown C, Borkian Antitrust economics and the 'Chicago School': A Judicial draining of America's entrepreneurial spirit, (1987) 19 *Antitrust L. & Econ. Rev.* 29

Burns J, Challenging the Chicago School on Vertical Restraints (2006) *Utah L. Rev.* 913

Burns M, 'Predatory Pricing and the Acquisition Cost of Competitors' (1986) 94 *J. Pol. Econ.* 266, 290-91

Burstein M, 'A theory of Full-line forcing' (1960) 55 *Northwestern University Law Review* 62

Carlton D, Michael Waldman, 'The Strategic use of tying to preserve and create market power in evolving industries' (2002) 33 *RAND. J. Econ* 194

Choi J, Christodoulos Stefanadis, 'Tying, investment, and the dynamic leverage theory' (2001) 32 *RAND. J. Econ.* 52, 59

Díaz F, Antón Leis García, 'Tying and bundling under EU competition law: future prospects' (2007) 3 *Competition L. Int'l* 13

Dolmans M, Thomas Graf, 'Analysis of Tying Under Article 82 EC: The European Commission's Microsoft Decision in Perspective' (2004) 27(2) *World Competition* 225

Dolmans M, Thomas Graf, David R. Little, 'Microsoft's browser choice commitments and public interoperability undertaking' (2010) 31(7) E.C.L.R. 268

Easterbrook F, 'Workable Antitrust Policy' (1986) 84 Mich. L. Rev. 1696

Easterbrook F, The Chicago School and Exclusionary Conduct (2008) 31 Harvard Journal of Law and Public Policy 439

Eibl S, Jorg-Martin Schultze, 'From Freiburg to Brussels and back again? The seventh revision of Germany's competition law. (2005) ECLR 526, 527

Eilmansberger T, How to Distinguish good from Bad competition under article 82 EC: in search of clearer and more coherent standards for anti-competitive abuses' [2005] 42 C.M.L.R 129

Etro F, 'Competition Policy: Toward a new approach' (2006) 2(1) Eur. Competition J. 29, 33-34

Evans D, A Jorge Padilla and Michele Polo, 'Tying in Platform Software: Reasons for a Rule of reason Standard in European Competition Law' (2002) 25(4) World Competition L.& Econ.Rev. 509

Evans D, Michael Salinger, 'Why do firms bundle and tie? Evidence from competitive markets and implications for tying law' [2005] Yal.J. on Reg. 41

Forrester I, The Modernization of EC Antitrust Policy, Compatibility, Efficiency, Legal Security (2000) Florence, June 2/3 pp 4-5

Fox E, The Modernization of Antitrust: A new equilibrium, (1981) 66 Cornell L. Rev. 1140, 1140

Flynn J, The Misuse of Economic Analysis in Antitrust Litigation, (1981) 12 Sw. U. L. Rev. 335

Giocoli N, 'Competition versus property rights: American Antitrust law, the Freiburg School, and the early years of European competition policy' (2009) 5 JCL&E (4) 748

Goldschmidt N, Michael Wohlgemuth, 'Social Market Economy: origins, meanings and interpretations' CPE (2008) 19 269

Gormsen L, The Parallels between the Harvard Structural School and Article 82 EC and the divergences between the Chicago school and post-Chicago Schools and Article 82 EC (2008) 4 European Comp Journal 221

Gormsen L, Why the European Commission's enforcement priorities on article 82 EC should be withdrawn (2010) 31(2) E.C.L.R. 45

Grossekettler H, 'On Designing an Institutional Infrastructure for Economies: The Freiburg Legacy after 50 years' (1994) 21 (4) JES 9

Henning-Bodewig F, 'A new Act against unfair competition in Germany' [2005] 36(4) I.I.C. 421

Hobbelen H, Joelle Jablan, 'Presentational issues in the Microsoft II case: fair chance for all browsers or a European Commission imposed advantage for existing market players?' (2011) 32(4) E.C.L.R. 206

Hovenkamp H, Antitrust Policy after Chicago, (1985) 84 Mich. L. Rev. 213

Hovenkamp H, 'Post-Chicago Antitrust: A review and critique' [2001] 2 Colum.Bus.L.Rev. 257, 268

Jacobs M, An essay on the normative foundations of antitrust economics (1995) 74 N.C.L.Rev 219, 220, 236-237

Kallaugher J, Brian Sher, 'Rebates Revisited: Anticompetitive Effects and Exclusionary Abuse Under Article 82' [2004] 25(5) E.C.L.R. 263

Kareff S, 'Tetra Pak international SA v Commission (Tetra Pak II): The European Approach to monopoly leveraging' (1997) 28 Law & Pol'y Int'l Bus 549

Korah V, 'Tetra Pak II - lack of reasoning in Court's judgement' [1997] 18(2) E.C.L.R. 98

Korah V, 'The paucity of economic analysis in the EEC decisions on competition Tetra Pak II' [1993] 46 Current Legal Problems 148

Kovacic W, 'The intellectual DNA of modern U.S. competition law for dominant firm conduct: The Chicago/Harvard double helix' [2007] Colum. Bus. L. Rev. 1

Kühn K, Robert Stillman, Cristina Caffarra, 'Economic theories of bundling and their policy implications in abuse cases: an assessment in light of the Microsoft case' (2005) 1 Eur.Competition.J 85

Lahey J, 'Tying arrangements and the single product issue' (1970) 31 Ohio State Law Journal 861

Lane R, 'EU Law: Competition' (2010) 59(2) I.C.L.Q. 489

Larouche P, 'The European Microsoft Case at the Crossroads of Competition Policy and Innovation: Comment on Ahlborn and Evans' (2008) 75 Antitrust L.J. 933, 936

Malinauskaite J, 'The development of "consumer welfare" and its application in the competition law of the European Community and Lithuania' (2007) 18(10) I.C.C.L.R. 354, 359

May J, Antitrust in the Formative era: Political and Economic Theory in Constitutional and Antitrust analysis, 1880-1918, (1989) 50 Ohio State Law Journal 257

McGee J, 'Predatory Price Cutting: The Standard Oil (N.J.) Case' (1958) 1 J.L.&Econ. 137, 140-41

Melamed D, 'Afterword: The purposes of antitrust remedies' (2009) 76 Antitrust Law Journal 359

Mertikopoulou V, 'DG Competition's discussion paper on the application of Article 82 of the EC Treaty to exclusionary abuses: the proposed economic reform from a legal point of view' [2007] 28(4) E.C.L.R. 241

Minda G, 'Antitrust at Century's End' [1995] 48 S. M. U. L. Rev 1749

Mota S, 'Hide It or Unbundle It: A Comparison of the Antitrust Investigations Against Microsoft in the U.S. and the E.U.' (2005) 3(2) Pierce L. Rev. 183

Nalebuff B, 'Exclusionary bundling' [2005] 50 Antitrust.Bull 321, 328

Nazzini R, 'The Microsoft Case and the future of Article 82' (2008) 22 Antitrust 59

Niels G, Helen Jenkins, 'Reform of Article 82: where the link between dominance and effects breaks down' (2005) 26(11) E.C.L.R. 605

Oswalt-Eucken I, 'Freedom and Economic Power: Neglected Aspects of Walter Eucken's Work', Journal of Economic Studies; 1994; 21, 4 38

Padilla J, David S. Evans, 'Tying Under Article 82 EC and the Microsoft Decision: A Comment on Dolmans and Graf' (2004) 27 World Competition 4 503

Page W, The Chicago school and the evolution of antitrust: Characterization, antitrust injury and evidentiary sufficiency (1989) 75 Va. L. Rev. 1221

Pardolesi R, Andrea Renda, 'The European Commission's Case Against Microsoft: Kill Bill?' (2004) 27(4) World Competition 513

Petit N, Norman Neyrinck, 'Back to Microsoft I and II: Tying and the Art of Secret Magic' (2011) 2(2) J.E.C.L. & Pract.117

Pierce R, 'Is Post-Chicago Economics Ready for the Court Room? [2001] 69 Geo.Was.L.R. 1103, 1115

Pitofsky R, 'New Definitions of Relevant Market and the Assault on Antitrust' (1990) 90 COLUM. L. Rev. 1805

Posner R, The Chicago School of Antitrust Analysis (1979) 127 U.Pa.L.Rev 925

Rieter H, Matthaias Schmolz, 'The ideas of German Ordoliberalism 1938-45: pointing the way to a new economic order' EJHET 1:1 Autumn 1993 91

Riley A, 'Microsoft break-up inevitable?' (2004) 39 Euro. Law. 10

Robinson J, 'The Microsoft Browser Case: Why the Commission's Decision Fails to Convince (2010) 1(4) J.E.C.L. & Prac 317, 318

Rose I, Cynthia Ngwe, 'The Ordoliberal tradition in the EU, its influence on Art 82 EC and the IBA's comments on the Art 82 EC Discussion Paper' (2007) 3 Competition L.Int'l 8

Rowe F, The Decline of Antitrust and the Delusions of Models: The Faustian Pact of Law and Economics, (1984) 72 Geo. L.J. 1511, 1560

Sally R, Ordoliberalism and the Social Market: Classical Political Economy from Germany (1996) 1 *New Political Economy* 2 233

Salop S, 'Question: What is the real and proper antitrust welfare standard?' [2010] 22 *Loy. Consumer L. Rev.* 336, 352

Scherer F, 'Some Principles for Post-Chicago Antitrust Analysis' [2001] 52 *Case W.Res.L.Rev.* 5, 8

Schmalensee R, On the use of economic models in Antitrust: The RealLemon Case, (1979) 127 *U. Pa. L. Rev.* 994

Schmidt H, 'Article 82: is technological integration checkmated?' [2009] *Journal of Business Law* 354

Shapiro C, 'Aftermarkets and consumer welfare: Making sense of Kodak' [1995] 63 *Antitrust L.J.* 483, 484

Shubik M, 'Game theory, law and the concept of competition' (1991) 60 *U. Cin. L. Rev.* 285.

Spivack G, The Chicago School Approach to single firm exercises of monopoly power: a response, (1983) 52 *Antitrust L.J.* 651

Stucke M, 'Behavioural antitrust and monopolization' (2012) 8(3) *Journal of Competition Law & Economics* 545

Sullivan L, 'Post-Chicago Economics: Economists, Lawyers, Judges, and Enforcement Officials in a less Determinate Theoretical World' [1995] 63 *Antitrust L. J.* 669

Vesterdorf B, 'Article 102 TFEU and sanctions: appropriate when?' [2011] 32(11) *E.C.L.R.* 573

Vijver T, 'Article 102 TFEU: How to claim the application of objective justifications in the case of prima facie dominance abuses?' (2013) 4(2) Journal of European Competition Law & Practice 121, 129

Waelbroeck D, 'The Compatibility of Tying Agreements with Antitrust Rules: A comparative study of American and European Rules (1987) 7 Yearbook European Law 39

Waelbroeck D, "Michelin II: A Per Se Rule against Rebates by Dominant Companies?" (2005) 1(1) Journal of Competition Law & Economics 149

Samuel N. Weinstein, 'Bundles of Trouble: The possibilities for a new separate-product test in technology tying cases' (2002) 90 California Law Review 903

Whinston M, 'Tying Foreclosure, and Exclusion' (1990) 80 Am.Econ.Rev. 4 837, 843

White B, Countervailing power- Different rules for different markets? Conduct and context in antitrust law and economics, (1992) 41 Duke L.J. 1045

Wollenberg K, 'An Economic Analysis of Tie-In Sales: Re-examining the Leverage Theory' (1986-1987) 39 Stan. L. Rev. 737

Yao D, Susan S. Desanti, 'Game theory and the legal analysis of tacit collusion' (1993) 38 Antitrust Bull. 113

Working papers

The Arbeitskreis Freiburger Denkschrift (Working Group on the Freiburg Memorandum; Kluge 1988: 27-9)

Goldschmidt N, "Alfred Müller-Armack and Ludwig Erhard: Social Market Liberalism," [2007] Freiburg Discussion Papers on Constitutional Economics no. 04/12, University of Freiburg and Walter Eucken Institute pp14-15

Vanberg V, 'The Freiburg School: Walter Eucken and Ordoliberalism' (2004) Freiburg discussion papers on constitutional economics 04/11.

Warlouzet L, 'The Rise of European Competition Policy, 1950-1991: A Cross-Disciplinary Survey of a Contested Policy Sphere' EUI Working Paper RSCAS 2010/80

White L, 'The Postwar German "Wonder Economy" and Ordoliberalism' (2010) Working Paper 10-50, 33

White L, 'The Postwar German "Wonder Economy" and Ordoliberalism' (2010) Working Paper 10-50 (Chapter 9 The Clash of the Economic Ideas) 319

Will B, Dieter Schmidtchen, 'Fighting Cartels: Some Economics of Council Regulation (EC) 1/2003' Center for the Study of Law and Economics, Discussion Paper No 2008-02 (July 16, 2008)

Legislation

German Legislation

Article V para. 9 c) 2 i Conn. m. Article I, Act No. 2 56/VO No. 78

British Military Government Ordinance No. 78 of 12 February 1947

American Military Government Law No.56 of 12 February 1947

US Legislation

Clayton Antitrust Act 1914, 38 Stat. 730; 15 USCA Section 14 (1953)

Sherman Act, 26 Stat. 209, 15 U.S.C

EU Regulations

Council Regulation (EEC) 17/62 of 6 February 1962 First regulation implementing Articles 85 and 86 of the Treaty [1962] OJ L13/204

Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 (now 101 and 102) of the Treaty [2003] OJ L1/1, Article 7

Commission Decisions

Eurofix-Bauco v Hilti (IV/30.787 and 31.488) Commission Decision 88/138/EEC [1988] OJ L 65/19

Flat Glass (IV/31.906) Commission Decision 89/93/EEC [1988] OJ L 33/44

London European – Sabena (IV/32.318) Commission Decision 88/589/EEC [1988] OJ L 317/47

Napier Brown – British Sugar (Case IV/30.178) Commission Decision 88/518/EEC [1988] OJ L 284/41

Tetra Pak II (IV/31.043) Commission Decision 92/163/EEC [1992] OJ L72/1

Amministrazione Autonoma dei Monopoli di Stato (IV/36.010-F3) Commission Decision 98/538/EC [1998] OJ L 252/47

Van den Bergh Foods Limited (Case IV/34.073 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L 246/1

Trans-Atlantic Conference Agreement (Case IV/35.134) Commission Decision 1999/243/EC [1999] OJ L 95/1

DSD (Case COMP D3/34493) Commission Decision 2001/463/EC [2001] OJ L 166/1

De Post-La Poste (Case COMP/37.859) Commission Decision 2002/180/EC [2001] OJ L61/32

Microsoft (Case COMP/C-3/37.792) Commission Decision [2005] 4 CMLR 965

Commission Commitment Decisions

Microsoft (tying) (Case COMP/C-3/39.530)

Commission Memos

Commission 'Antitrust: Commission obtains from Google comparable display of specialised search rivals – Frequently asked questions' (MEMO/14/87) of 05/02/2014

Case Law

EU Case Law

Case 27/76 *United Brands v Commission* [1978] ECR 207, [1978] 1 CMLR 429

Case 85/76 *Hoffman-La Roche v Commission* [1979] ECR 461, [1979] 3 CMLR 211

Case 322/81 *Michelin v Commission* [1983] ECR 3461, [1985] 1 CMLR 282

Case 311/84 *Centre belge d'études de marché – Télémarketing (CBEM v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB)* [1985] ECR 3261

Case C-202/88 *France v Commission* [1991] ECR I-1271

Case T-30/89 *Hilti AG v Commission* [1991] ECR II – 1439

Case T-65/89 *BPB Industries and British Gypsum Ltd v Commission* [1993] ECR II – 0392

Case C-53/92 P *Hilti AG v Commission* [1994] ECR I – 667

Case T-83/91 *Tetra Pak v Commission* [1994] ECR II – 755

Case C-333/94 P *Tetra Pak v Commission* [1996] ECR I – 5951

Case T-203/01 *Michelin v Commission* [2003] ECR II-4071

Case T-201/04, *Microsoft v Commission* [2007] ECR II-3601

US Case law

Butchers' Union Slaughter House & Live Stock Landing Co. v Crescent City Live-Stock Landing & Slaughter-House Co 11U.S. 746, 754-60 (1884)

Carbice Corp. of America v American Patent Development Corp (1931) 283 U.S. 27, 30-32

Mercoid Corp. v Mid-Continent Investment Co. (1944) 320 U.S. 661, 667

Standard Oil Co of California v United States (1949) 337 US 293, 305, 69 S Ct 1051, 1058, 93 L Ed 1371

Times-Picayune Publishing Co. v. United States, 345 U.S. 594, 614 (1952)

Jerrold Electronics Corp. 187 F.Supp. 545 (E.D. Pa. 1960), aff'd per curiam, 365 U.S. 567 (1961)

Crawford Transport Co. v. Chrysler Corp. 235 F. Supp. 751 (E.D. Ky. 1962), aff'd, 338 F.2d 934 (6 Cir. 1964), cert, denied, 380 U.S. 954 (1965)

Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 50-59 & n.21 (1977)

Illinois Brick C. v. Illinois, 431 U.S. 720, 731-44 (1977)

United States Steel Corp. v. Fortner Enterprises, 429 U.S. 610, 620-22 (1977)

Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 488-89 (1977)

Broadcast Music, Inc. v. Columbia Broadcasting Sys., 441 U.S. 1, 9-10, 19-21 (1979)

Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979)

United States v. International Business Machines Corporation, No. 69 Civ. 200 DNE (S.D. NY) 539 F.Supp. 473 (1982)

Jefferson Parish Hospital Dist. No. 2 v. Hyde, 466 U.S. 2 (1984)

NCAA v. Board of Regents, 468 U.S. 85, 100-15 (1984)

Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 767-71, 775-77 (1984)

Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 762-64 (1984)

Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 11-18 (1984) (majority)

Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 105 S. Ct. 2847, 2857-59 (1985)

Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co., 105 S. Ct. 2613, 2619-21 (1985)

FTC v. Indiana Fedn. of Dentists, 106 S. Ct. 2009, 2018-20 (1986)

Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 106 S. Ct. 1348, 1354-60 (1986)

Eastman Kodak Co v Image Technical Services Inc., (1992) 112 S.Ct. 2072

United States v. Microsoft Corporation 87 F.Supp.2d 30 (D.D.C 2000), 253 F.3d 34, 47 (D.C.Cir) (2001)

United States v Microsoft Corp., 2001 U.S. Dist Lexis 24272 *8 (D.D.C. Sept. 28, 2001)

United States v Microsoft Corp., 2002 WL 31654530 at *16 (D.D.C. Nov. 12, 2002)

Mass. v Microsoft Corp., 373 F.3d 1205-1207, 1210.

United States v Microsoft Corp., Modified Final Judgement 7 September 2006, Civil Action No. 98-1232

German Case Law

Bandeisen- und im Schuhmaschinenfall, RGZ 135, 145; 165, 1

Drahtverschlußmaschinen case (full citation unavailable)

Intergovernmental Conferences

Conference Intergouvernementale pour le Marche Commun et L'Euratom
Bruxelles, le 18 Septembre 1956 Tableau Synoptique des Projets D'Articles
Soumis par Les Délégations Concernant Les Regles de Concurrence
Applicables Aux Entreprises

Congressional reports

2 Cong Rec 2461 (1890)

Presentations

Hagemann H, Germany after WWII: Ordoliberalism, the Social Market
Economy, and Keynesianism (presentation)

Web pages

<<http://www.kas.de/wf/de/71.5885/>> accessed 16 April 2014

Joseph Van Tichelen, Souvenirs de la négociation du traité de Rome
<http://www.ena.lu/joseph_van_tichelen_souvenirs_negociation_traite_rome-010007163.html> accessed on 03/2011

< <http://www.britannica.com/EBchecked/topic/616563/United-States/77809/Industrialization-of-the-US-economy?anchor=ref612906>>
accessed 19/08/2014

<<http://www.elopak.com/language=en/1033/history>> accessed on 11/06/2011

<<http://www.elopak.com/language=en/taps=1050/1532>> accessed on
11/06/2011

< <http://www.microsoft.com/presspass/legal/european/04-24-06windowsxpnsalesfs.msp>> published April 2006 (accessed 29 May 2013)

<<http://gs.statcounter.com/#browser-eu-monthly-200807-200912>> accessed
10/07/2014

<<http://gs.statcounter.com/#browser-ww-monthly-200807-201309>> accessed
11/10/2013

<<http://www.w3counter.com/trends>> accessed 11/10/2013

<<http://marketshare.hitslink.com/browser-market-share.aspx?qprid=1&qpcustomb=0&qpsp=2008&qpnp=6&qptimeframe=Y>>
accessed 11/10/2013

Reports

Paul-Henri Spaak, 'Intergovernmental Committee on European Integration. The Brussels Report on the General Common Market' (June 1956)

Report of the Attorney General's National Committee to Study the Antitrust Laws (1955) 145 (United States)

Report by the Economic Advisory Group on Competition Policy: "An economic approach to Article 82" (July 2005)

Guidance/Guidelines

U.S. Department of Justice Merger Guidelines-1982, reprinted in 4 Trade Reg. Rep. (CCH) 13,102 (June 14, 1982)

Guidance on its enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C 45/02

Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (Communication) (2009) OJ C 45/02