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Incentives and risks in technology transfer

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Summary

Technology transfer in this thesis refers to the transferring of technology due to a technology licensing agreement. As with every sort of agreement there are potential risks in technology transfer. The greatest risk that technology transfer agreements bring is the potential distortion of competition. Technology transfer agreements may very well restrict competition due to the elements of exclusivity.

When assessing competition law issues it is always easy to fall back on economic theories since they are interlinked with the market and the competition issues of the market. EC competition law has an efficiency goal of increasing wealth and thereby welfare. The competition rules have as their objective to enable and protect competition on the market. By furthering technological development competition law strengthens competition on the market.

Licensing agreements and thereby technology transfer agreements promote competition through dissemination of technology and knowledge. Article 81(1) EC is applicable if an agreement or concerted practice affect trade between member states. Article 81(3) EC provides exemptions from the prohibition in article 81(1) EC. The TTBER together with the guidelines explain if and what application article 81 EC has to technology transfer agreements. An agreement complies with EU competition law if it is a technology transfer agreement in which the concerned undertakings, the two parties, have market shares that stay below the thresholds set out in the regulation.

The 2004 TTBER calls for an economic assessment of likely pro-competitive and anti-competitive effects that the agreement might have on the relevant market. Difficulties are likely to arise with the self-assessment that the undertakings are to make; difficulties can also exist in defining the market and calculating market shares accurately. Self-assessment contains an element of uncertainty and insecurity. Even though there is no formal control following up the self-assessment made by the concerned undertakings, the risk of being scrutinized under article 81 EC remains. The parties of the technology transfer agreement may also find themselves feeling sceptical towards their agreement, the self-assessment or the TTBE as such.

My suggestion would be that if possible still leave the assessment up to the concerned undertakings but add a requirement for the undertakings to submit an argumentative report to the Commission arguing their case and reaching a conclusion as to why their particular agreement falls within the scope of the TTBE and therefore should be exempted. The entire purpose of an argument is to produce a true conclusion as well as to persuade an

audience, if having to do this the parties might very well perform better in making self-assessments.

The new TTBE is claiming to be pro-competitive in its structure to help furthering the pro-competitive effects of technology transfer agreements, but there are many elements in the TTBE that create the opposite effect. There are even a few articles in the TTBER that open up for concerned undertakings to abuse the legislation and potentially work against the competition goal of the common market. If this brings forth a risk of a reduced number of technology transfer agreements being concluded one cannot possibly say that the TTBE measures up to its stated ambition and purpose.

Sammanfattning

Teknologitransferering ska i denna uppsats förstås som överföring av teknologi på grund av ett avtal mellan två parter. Avtal rörande teknologitransferering medför liksom andra typer av avtal vissa risker varav den största är den potentiella risken att konkurrensen på marknaden störs, vilket bland annat kan bero på inslagen av exklusivitet i avtalet.

Det är praktiskt och lätt hänt att man vid utredningar rörande konkurrensfrågor faller tillbaka på ekonomiska teorier eftersom de samspelar på marknaden. Konkurrensrätten inom EU har som mål att stärka välfärden och välståndet på den gemensamma marknaden, reglerna syftar till att möjliggöra och skydda konkurrensen. Genom att konkurrensrätten främjar den teknologiska utvecklingen stärker den också konkurrensen på marknaden.

Licensavtal och därmed avtal rörande teknologitransferering främjar konkurrensen genom att sprida teknologi och kunskap. Artikel 81(1) EC är tillämplig om ett avtal påverkar handeln mellan medlemsstaterna. Artikel 81(3) EC tillhandahåller undantag från förbudet i artikel 81(1) EC. TTBER tillsammans med sina guidelines förklarar om och hur artikel 81 EC ska tillämpas på avtal rörande teknologitransferering. Ett avtal stämmer överens med konkurrensrätten inom EU om det är ett teknologitransfereringsavtal mellan två parter vars marknadsandelar håller sig undan de trösklar som finns i TTBER.

2004 års TTBER kräver en ekonomisk utredning av möjliga konkurrensbegränsande respektive konkurrensfrämjande effekter som avtalet kan ha på den relevanta marknaden. Svårigheter kan uppkomma vad gäller den utredning som parterna själva ska genomföra för att se om de är berättigade till ett undantag, andra svårigheter som kan uppkomma är fastställandet av den relevanta marknaden och marknadsandelar. Utredningen innehåller också inslag av osäkerhet, för även om det inte finns någon formell uppföljning av utredningen så kvarstår risken att bli utredd under artikel 81 EC. Parterna kan också vara skeptiska till sitt eget avtal, utredningen de ska göra eller till och med till TTBE överhuvudtaget.

Mitt förslag för att lösa problemen med osäkerheten är att förvisso låta parterna göra utredningen men med det tillägget att de måste lämna in en argumenterande rapport till Kommissionen där de för fram sin sak och slutsats angående varför deras avtal ska bli föremål för ett undantag. Hela syftet med argument är att nå en sann slutsats och att övertyga sin publik, därför är det troligt att parterna skulle lyckas bättre i utredningarna av sina avtal om ett dylikt krav fanns.

TTBE påstår sig vara konkurrensfrämjande till sin utformning för att främja de konkurrensfrämjande effekter som teknologitransfereringsavtal har, men

det finns många inslag i TTBE som kan ge motsatt effekt. Det finns till och med några artiklar som öppnar upp för parterna att utnyttja regleringen och därmed motarbeta konkurrensmålet på den gemensamma marknaden. Detta kan medföra en risk för minskat antal avtal för teknologitransferering och om så är fallet så kan det inte sägas att TTBE lever upp till sitt syfte.

Preface

A lot of effort has been put into the making of this thesis, not only by me but also by Patricia Jonsson, my dear friend in Geneva, who has taken upon herself to be in charge of proofreading and commenting on my thesis continuously throughout the period in which it has been written. She has been of great help and I am very grateful to her. I would also like to thank my supervisor Henrik Norinder who has kept a positive attitude towards my work from the beginning. Last but not least I want to show my gratitude to my fiancé Daniel for keeping my spirits up through the entire writing process. Also I would like to send out my thanks to everyone else that may feel left out here but in some way or another has helped or supported me this spring as well as the last four and a half years during my law studies.

Katrin Nilsson
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Abbreviations

EC	European Community
ECJ	European Court of Justice
IP	Intellectual property
IPR	Intellectual property right
IPRs	Intellectual property rights
R & D	Research and development
TRIPs	Agreement on trade- related aspects of intellectual property rights.
TTBE	Technology transfer block exemption
TTBER	Technology transfer block exemption regulation

1 Introduction

Discussions addressing the problematic intersection between IPRs and competition have been conducted for a very long time with various results, but almost always with the aim of trying to determine which one should be favoured over the other, IP law or competition law? The goal of the EU market is that the market is free, open and competitive, and even though this competition goal is an important one within the EU the question is how to best reach that goal. Throughout the history of the EU different measures have been taken and different means have been chosen in order to reach the competition goal. Legislations have over time helped in the strive but problems remain.

The main competition clauses are found in article 81 and 82 EC of the EC Treaty¹, and these are complemented by regulations regarding various types of conducts and guidelines giving detailed explanations of how to assess particular situations.

In 2004 a big reform took place and many regulations were replaced by new ones; this was done in order to promote a more economic based assessment of different conducts in line with the new thinking of the Commission. The new regulations were also drafted to replace regulations that had been heavily criticised of being too formalistic and static instead of flexible. One of the legislations that was renewed was the block exemption for technology transfer agreements. Since the reform, no specific cases and discussions seem to have come into the light, but the subject is a current and interesting one, wherefore this thesis will look at the potential improvements or mistakes that can be found in the new TTBE legislation.

1.1 Purpose

My main purpose is to scrutinize the interplay between the purpose of the new TTBE and the actual structure of the TTBER² with accompanying guidelines.³ The question is whether the legislation is suitable in regards to the object of the TTBE? Since there have been problems with the legislation up till the last reform I begin this thesis believing that, even though the Commission probably has understood the problems and criticisms made and has tried to draft the new legislation in order to solve those problems, the Commission has not been able to foresee and solve each and every issue that

¹ EC Treaty, 25 March 1957 as amended in accordance with the consolidated version of the Treaty of Nice, OJ 2002 C 325/1.

² Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81 (3) of the Treaty to categories of technology transfer agreements. OJ L 123 27/04/2004 (2004 technology Transfer Regulation).

³ Commission Notice: Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements (2004/C101/02) OJ C101, 27/04/2004 (2004 Technology Transfer Guidelines).

needs to be assessed in order to reach the competition goal of the common market. If I am right and there are still problems with the new TTBE, what are those problems and why do they exist? Could they be handled differently and in that case how? The overall perspective in this thesis comes from the theories of welfare economics, and I have chosen this perspective because it is useful when trying to find out what legal improvements can be made in order to promote wealth and welfare in society, which is an ancillary goal to the competition goal.

1.2 Method and material

Well aware of the fact that I see what I see because I am who I am, I will not claim to be completely neutral in writing this thesis.

The jurisprudential method used in this thesis aims at increasing the knowledge in the assessed area of technology transfer, trying to establish something new and if possible point out general patterns and coherence between different conducts. Hopefully the jurisprudential method will end up in the development of new principles that apply to the assessed question. In my analysis I have chosen the method of systematising, which is a way of generalising aiming at taking ones thoughts out of the bigger context and placing them into the thesis in an attempt to enrich the analysis. I am also trying to place the conclusions drawn into a bigger context and judge their compatibility with the issues and system of my chosen area.

In regards to literature, many articles and doctrines cover the new TTBE but unfortunately they do nothing more than repeat what is found in the TTBER and the guidelines, probably because most of them were written shortly after the new TTBE came into force. It is also possible to find some more articles analysing or discussing the topic which were written after the draft was presented but before the new TTBE was finished and adopted. There is no case-law dealing with the new TTBE that I will present in this thesis, thus the only case-law that will be used is earlier case-law which will help to explain the development of the legislation. The literature I have chosen has been of assistance to my work to various degrees, meaning that some have been more helpful than others, to name a couple, Dahlman and Hildebrand are the two that I have primarily based the chapter on welfare economics on. Lidgard's course literature has been of help since technology transfer is very easily explained and described in his works. Primarily however, I have found most use of all the legislation drafted by the Commission in regards to both article 81 EC and the new TTBE.

I have mainly chosen to place my focus on the purposes and objects of the TTBE because it is very exciting and well cut out to be analysed from a welfare economic perspective making the assessment very interesting in my opinion.

I will use central welfare economic theories as a basis when assessing the purpose of this thesis. These theories will also be used in the analysis and as

support for statements made throughout the thesis. Welfare economic theories are very well cut out to be used when assessing legal issues especially legal issues that involve the economic market. As will be explained in more detail later on, the Commission has also explicitly stated that an economic-based evaluation is to be done in regards to the TTBE.

When looking at the phenomena of technology transfer and going through the new TTBE I am essentially trying to understand whether or not the TTBE actually leaves room for an economic based assessment and if it actually is structured in the best way to further competition. I have chosen to build up my thesis in a way where facts in a specific case are not central since the perspective is more general trying to assess the effects and so forth of the new TTBE. By this I do not mean that this is a quantitative thesis-it is in fact the opposite since the method is jurisprudential and the work is aiming at being qualitative and thus focusing on argumentation trying to increase the knowledge of the law in the particular area of technology transfer. The argumentation is free and based on the legal sources and evaluations as well as on the purpose of the legislation and the assessments made. Much of the argumentation is of course based on the welfare economic perspective that covers the entire work. Most of the argumentation takes place in the analysis but is also found in certain places throughout the work. At the end the arguments will be weighed together in the effort to reach well founded conclusions and remarks.

1.3 Delimitations

New questions and problems are likely to arise during the writing of this thesis, wherefore it is vital to make delimitations right from the start in order to narrow down the scope of the thesis making it more accessible and focused. In the subchapters regarding purpose and method most of these delimitations are already spelled out. One important thing that needs to be mentioned is the fact that I will not go into old case-law in order to prove my points since I do not believe that it will bring anything vital to the table especially since this thesis is trying to evaluate a new legislation which has not seemingly been subject to any legal proceedings up till now. Another point to note is that issues regarding dominance and article 82 EC will be overlooked.

1.4 Outline

The thesis starts by a presentation of the phenomenon of technology transfer and technology transfer agreements in chapter 2. The concepts are explained where after the concerned parties and their positions are presented, namely what are the incentives and risks in technology transfer? This is also assessed together with discussions on licensing agreements and IPRs in general. Chapter 2 ends with an example of the situation on the Chinese market to further explain technology transfer.

In chapter 3 the main concepts and theories in welfare economics are explained together with explanations as to the reason why the perspective of welfare economics is used in this thesis. What competition is and why it is so important will be assessed in chapter 3.2 when competition theories are presented.

Chapter 4 constitutes the main chapter in this thesis since this is where the legislation regarding technology transfer is presented and discussed. Going from article 81 EC to the TTBE the picture will be clear as to how technology transfer agreements are to be dealt with on the common market.

The analysis of the material and the effect of the new TTBE are found in chapter 5 where some main criticism and reflections are made. The thesis finishes with chapter 6 where conclusions are drawn and final remarks are put forth based on the material and thoughts in the analysis.

2 Technology transfer

In this chapter the concept of technology transfer will be defined and discussed. What reasons are there for technology transfer and what are the incentives for going forth with it? Potential risks will be brought up and a discussion regarding the different positions that the concerned parties may have in the process will be held. A short presentation of IPRs in technology transfer and licensing agreements in general is vital to the comprehension of the technology transfer phenomenon.

2.1 The concepts of technology and technology transfer

Technology can be defined in many different ways; in human society technology is a consequence of science and engineering. Technology affects societies in many ways and has for example been responsible for the development of more advanced economies. One definition of technology is: “the practical application of knowledge especially in a particular area”.⁴ Both material and immaterial entities that come from the effort of achieving value of some sort is regarded as technology.

The concept of technology transfer is often understood as “the sharing of technological information through education and training” or as the “use of a concept or product from one technology to solve a problem in an unrelated one”.⁵ Thus, technology transfer is understood to be the process of developing practical applications for the purposes of scientific research. Even though this is vital knowledge in regards to comprehending technology transfer, it is however, not primarily the way in which technology transfer is to be understood in this thesis. Technology transfer in this thesis refers to the transferring of technology, for example the transferring of IPRs, between two parties, due to a technology licensing agreement.

2.2 The concerned parties and their positions

Technology transfer is most likely to occur where economic stability is found. The parties must be able to foresee at least some profit coming out of the transfer technology agreement. This reasoning is based on the fact that the concerned parties are profit making entities. If the risk of loosing money is too high there will probably not be an agreement.

⁴ Merriam Webster dictionary

⁵ http://en.wiktionary.org/wiki/Technology_transfer, 2007-03-20.

A technology transfer agreement is most likely built on the terms of the right holder, since he/she is the one holding the rights to technology and thereby also the choice of how to exploit them. The right holder has a patented technology and needs to exploit this technology commercially in an efficient way in order to maximize economic profits. Not many patent holders have the possibility of both developing, producing and then also distributing the product on the market, wherefore individual exploitation seldom occurs. The right holder therefore chooses to transfer the technology through an agreement to a licensor who holds the necessary means to realize the commercial potential of the technology. The right holder could also decide on transferring the technology so that the entire ownership is transferred in exchange for money, however, this is not the kind of technology transfer discussed in this thesis. To be kept in mind is the fact that it is up to the right holder whether to transfer the technology or not.

Technology transfer agreements constitute a contractual grant allowing the licensee to exploit the exclusive right of the licensor. The agreement combines the undertakings' complementary resources striving to make best use of them while reducing individual weaknesses. From the licensor's perspective this gives access to resources which he/she otherwise lacks. The licensor relies on the licensee to improve the technology and then give the licensor a right to these future developments. The licensee may suffer from limitations in his own R&D, thus getting access to a patented technology might contribute to the creation of new innovations as well as to improvements and new methods of applying the technology more efficiently in a shorter period of time. The knowledge that the information about the patented technology provides most certainly facilitates strategic decisions in regards to choosing what technology transfer agreement to enter.

2.3 Reasons and incentives for technology transfer

Technologies are becoming more and more complex and in order to keep up with the rapid changes and improvements it seems to have become more common and necessary to join forces as discussed above by e.g. starting up pools, such as the blue-tooth pool, creating standards for standards. The increased complexity in technologies is also demonstrated by the more intricate licensing agreements and the increased amount of technology transfer that has taken place lately.⁶

2.3.1 Licensing agreements

Horizontal agreements consist of cooperation between competitors, which can possibly lead to competition problems but which can also give ground for economic benefits. Article 81 EC is structured in a way that gives the possibility to take both anti-competitive and pro-competitive effects into

⁶ P. Lowe, p. 580.

account. A licensing agreement could constitute one type of horizontal agreement, for example a licensor holding know-how or IPR who gives a licensee the right to exploit the know-how or IPR through manufacturing, using or selling the product. Whenever the licence in question is a manufacturing license, the agreement has a horizontal character and is dealt with under the 2004 Technology Transfer Regulation.⁷ The application and significance of the legislation will be thoroughly discussed in chapter 4 of this thesis.

Having an IPR does not necessarily constitute market power as such, since other competing technologies must also be taken into account when doing an assessment in regards to market dominance. Licensing can therefore be considered pro-competitive even if containing restrictions. Licensing allows

“the integration of complementary assets, allows for more rapid entry, helps disseminating the technology and provides a reward for what usually is a risky investment”.⁸

Of course, if on the other hand the IPR gives the right holder market power, competition may be restricted and it is important that competition is protected whenever this is the case.

It is very common that the inventor cannot afford or does not have the capacity to produce the invention himself wherefore someone else needs to do so. This is the main reason for licensing agreements. It is forbidden for someone other than the right holder to exploit the IPR unless having been granted a licence. A licensing agreement is a means of transferring technology, hence the name, technology transfer agreements.

Technology transfer agreements may very well restrict competition due to the elements of exclusivity. Licensing consist of a limited right to the right holder’s technology.

2.3.2 Intellectual properties in technology transfer

There is a potential conflict between IPRs and the free competitive market. Monopolies should not be granted at the expense of free competition. IPRs create a legal monopoly for the right holder. The tension between IPRs and competition has been found in the view that, while IPRs created monopolies, competition law tried to eliminate monopolies. Lately, the Commission tends to think of the two areas as complementing each other, with the common goal to promote innovation, which in turn will be beneficial to consumers. Innovation and dynamic efficiency stimulates economic growth and strengthens the welfare of society as a whole giving society an incentive to promote innovation. Innovation tends to grow out of

⁷ H H., Lidgaard, p. 239f.

⁸ P. Lowe, p. 581.

competition and cooperation between undertakings and since this leads to more competition, economic growth derives from innovation.

Innovation is a source of competition at the same time as competition is an incentive for innovation. IPRs are national rights, their existence is not affected by EC competition law but the exercise of them may very well be. The central question being whether the right holder acts inside or outside the scope of his rights. IPRs are seen as incentives for innovation but also as rewards. There is a certain amount of R&D on innovations that would not be done without the possibility of getting an IPR. The possibility of obtaining an IPR works as an incentive, making the R&D seem worth while. IPRs can be seen as barriers to entry a market, but at the same time they are probably necessary in order to encourage innovation.

In the pursuit of an IPR the inventor has to disclose information which might otherwise have been kept secret. In relation to technology transfer IPRs are therefore beneficial due to the disclosure requirement. The incentive the requirement brings contributes to the desired dissemination of scientific and technological innovation. Disclosure of information leads to a lessened risk of duplication and facilitates further innovations. Access to information makes it possible to put a value on the right, which is not possible in the same sense if there is no IPR. Hence, IPRs play a significant role in reducing transaction costs of licensing innovations and in technology transfer. IPRs are also said to promote investments in R&D. R&D investments tend to bring about uncertainty and high costs, but IP law is compensatory protecting technological advance and profits by giving the right to exclude others, thus preventing e.g. free-riding. Although there is tension between IP law and competition law there are some objectives shared by technology transfer/licensing and competition law, such as the stimulation of R&D, the diffusion of technology and the promotion of efficient allocation as well as the utilization of economic resources.⁹ Diffusion of technology leads to more products being put on the market which enforces product competition.

2.4 Potential risks in technology transfer

As with every sort of agreement there are potential risks in technology transfer. Each individual case has its own risks depending on the parties, the agreement as such etc. This subchapter aims at presenting some risks that perhaps should be taken into account in each case of technology transfer. Since every coin has two sides, it is important to note the fact that what works as incentives for going forth with a technology transfer agreement might also be a potential risk or threat to the market or the parties. At the end of the subchapter an example will help illustrate potential risks and methods to deal with them.

⁹ E., Ohlsson, p. 1.

2.4.1 Risks on the market

The greatest risk that technology transfer agreements, or any licensing agreement for that matter, bring is the potential distortion of competition. In chapter 3.2, competition will be more thoroughly discussed, but it can be said already at this point that the goal is to strive for a free competitive market on the common market. Agreements or other conducts that have as their object or effect the restriction of competition of any kind are not to be allowed and is dealt with under the competition rules in the EC treaty. These rules will be dealt with in chapter 4 together with possible exemptions. Through technology transfer agreement, depending on the width of the scope of the right, it is also a risk that there will not be any potential substitutes on the market, enabling the right holder to raise prices and reduce production in order to maximize profits. Such behaviour does not promote competition rather the opposite and should be prevented. If the IPR gives the right holder too much market power, competition is likely restricted working against the aim of a free competitive market. It is important that competition is protected whenever that is the case. No monopolies or abuse of market power should be allowed on the expense of workable competition.

Another problem for the market that technology transfer agreements put forth concerns grant-backs. The possible scenario being that the undertakings concerned decides on providing each other with grant-backs, taking the form of the licensee first receiving the right to produce and develop the initial technology, where after the derivations and developments are licensed back to the licensor and so forth. The problem with this is obvious; competition will be heavily restricted in the sense that no other undertaking will receive information about the technology in order to make new innovations and developments. Competition in R & D is far from stimulated; instead the market is presented with a monopoly of the kind that is unwished for leaving all the power to the concerned undertakings.

2.4.2 Risks for the parties

Usually a technology transfer agreement creates a “win-win”-situation for both parties and is therefore believed to be positive on both sides. However, situations with negative impacts may occur; in order to avoid these drawbacks it is vital to make sure that the agreement is well-written, not leaving room for misinterpretations. For example, it must be specified what exactly lies within the scope of the licensed right. Event though a perfectly written agreement helps a great deal in preventing breaches to the agreement by going outside its scope, it leaves no guarantees.

As discussed above technology transfer in relation to IPRs are beneficial due to the disclosure requirement which contributes to the desired dissemination of scientific and technological innovation. One thought is that the disclosure of information leads to a lessened risk of duplication, but what about copying? Depending on how reliable the licensee is information

can very well leak out to unauthorized persons and provide them with the possibilities to copy the technology without having a licence, even though it is a well known fact that it is forbidden for someone other than the right holder to exploit the IPR unless having been granted a licence. Another risk can be that the licensee steals the technology by adapting it as their own. The greatest risk of this scenario exists in the situation where the licensee develops a new product or technology from the licensed technology in such a way that proving that the technology originates from the licensor seems almost impossible. Thus, it can be concluded that the strategic decisions that the licensee is able to make thanks to the knowledge and information received about the patented technology might sometimes be harmful to the licensor. The licensee will through the mentioned conducts make the licensor loose money. One main incentive for the licensor to transfer the technology is to make a profit, if the risks of loosing money outweigh the expected profits the right holder/licensor might well refrain from transferring the technology.

An indispensable question for the right holder to take into account before entering a technology transfer agreement pertains to location; where is the licensor's production located? Legislation as well as other aspects of society might differ greatly from what the right holder is used to, bringing forth risks that is otherwise bound to be overlooked. It is vital to understand the difficulties in protecting the licensed technology and how these are to be solved, when e.g. the legislative framework is not followed in the way that the right holder is accustomed to. More than once has it been said that the western world cannot possibly expect developing countries to reach the same standards in a short period of time knowing it took the western world several decades, if not centuries to be at the point it is now. Due to TRIPs¹⁰ minimum standards cover the world and its IP protection, countries are moving closer to one another in regards to how they value IPRs. Before TRIPs the differences in the legal systems of the world dealing with IP law could be an even bigger problem than it is now. Also, it should be understood that not all legal systems promote and protect IPRs.

2.4.3 China - an example

China is an expansive market attracting new technology and knowledge, not by chance but as a strategy. Aware of the fact that a well developed legal framework makes it easier to attract investors and companies, China now has come a long way in developing such a system¹¹, even so when a company deals with the Chinese market the risk of being copied or plagiarized must be weighed against the potential profits. The same situation occurred in Japan during the 1960s due to undeveloped IP laws. Nowadays the problems that once existed with copying in Japan are minimized and the same development is likely to take place in China given time. Perhaps to

¹⁰ 1997 TRIPs agreement.

¹¹ P., Ehrenberg et al., p. 14.

avoid the risk of being copied it is most vital to make certain that the agreements are waterproof, to have inspections in place, and to make sure the persons with access to secret information are to be trusted. Since the market is of great economic interest it would not be in anyone's interest to exclude China. The awareness of IPRs is increasing¹² and the risk of being copied will as a consequence, likely decrease. Copying takes place when knowledge is transferred to outsiders; one way of avoiding this is to use a slightly older technology and lower the amount of atomisation.¹³ Other technological risks are high costs for education and training if the competence among the local workers is inadequate. All three areas of the production technology, namely hardware, information and knowledge must be transferred in order to obtain efficiency.¹⁴ Another problem with technology transfer to China is potential difficulties in bringing home accumulated profits.¹⁵ When dealing with the Chinese market it is also important to build good relationships with the authorities making solid initial agreements in order to avoid potential risks in the long term.

¹² <http://www.di.se> 2007-04-07.

¹³ P., Ehrenberg et al., p. 20.

¹⁴ Ibid, p. 12.

¹⁵ Ibid, p. 18.

3 Welfare economics and competition

This chapter deals with how competition theory relates to welfare economic theory, as well as how technology transfer agreements relate to welfare economics and competition. To some extent, technology transfer agreements' relation to competition has been introduced in the previous chapter, thus the aim of this chapter is to expand on the subject by presenting the welfare economics perspective. Some knowledge and understanding of welfare economics as a part of micro-economic theory is required in order to fully comprehend the assessments made in the remainder of this thesis. However, some of the most important concepts of this thesis will be defined as a service to the reader.

3.1 Economic theories

One question the reader might ask him/herself is why economics are discussed in a paper focused on the legal area. The answer according to the author is that it depends on the legal area discussed. Competition law is an area where it comes naturally to assess different subjects using welfare economics. In fact both IPRs and competition law are main issues in welfare economic discussions, so why not then use welfare economics to explain a legal phenomenon such as technology transfer, especially, as will be shown later on, since TTBER has been modernized in line with a more economic based approach.

3.1.1 An economic view on law

Legislation, regulations and legal principles exist in order to work as instruments in the effort to further the economic efficiency in society.¹⁶ The economic view of laws is that they create incentives for changing behaviour and most significant for this thesis is that they are instruments for fulfilling the objectives of efficiency and distribution on the market.¹⁷ In general “economics provides a behavioural theory to predict how people respond to changes in law”.¹⁸ Economic efficiency is pursued since it creates wealth. When people act in an economically efficient way their personal wealth grows which in turn makes the overall wealth of society greater. In order to further wealth it is important to create possibilities for voluntary transactions and this is where legal systems come in. In addition to creating these possibilities it also protects the established transactions.¹⁹

¹⁶ Dahlman et al, p.65.

¹⁷ Cooter & Ulen, p. 7.

¹⁸ Ibid, p. 3.

¹⁹ Dahlman et al, p. 78.

3.1.2 Micro-economic theory

The main issue dealt with in micro-economic theory is how society is to use its limited resources in the best way possible. Dealing with decision-making by small groups and having its main focus on how “scarce resources are allocated among competing ends”²⁰, microeconomic theory mainly discuss three important concepts: maximization, equilibrium and efficiency.

3.1.2.1 Main concepts

Maximization has the purpose of showing that each economic actor wishes to maximize something, consumers are utility-maximizers and producers are profit-maximizers. In the search of maximization *equilibrium* of some sort is reached. Equilibrium can be defined as a “pattern of interaction that persists unless disturbed by outside forces”.²¹ The third concept, *efficiency*, concerns economic efficiency of different sorts. Pareto-efficiency is reached when there is no possible way of changing the situation in order for at least one person to be better off without making someone else worse off. This basically means that all possible transactions that would maximize the welfare of society have been performed. Kaldor-Hicks efficiency recommends only going through with changes which will make at least one individual better off without making someone else worse off. So far its very similar to Pareto-efficiency, the difference is that Kaldor-Hicks efficiency recognize this as impossible in real life and thus takes it one step further, by arguing that gainers are to explicitly compensate losers.²²

3.1.2.2 Game-theory

The fundamental idea behind game-theory is based on the choice of the individual; this choice however is a strategic result of interaction with other individuals. Individuals are called players and the result of their interaction depends on what strategies they choose. The best strategy for each player is the one that maximizes his or her payoff given the other players strategies. Game-theory can be compared to how neoclassical economist believe that the individual always make rational choices to maximize his or her outcome.²³ The common ground being that individuals are seeking maximization, the difference being that game-theory appreciates the impact of other individuals’ choices. Nash-equilibrium is reached when none of the players can be better off by changing strategies unless the others change theirs as well. A Nash-equilibrium is not Pareto-efficient.

3.1.3 Welfare economics

Welfare economics can be seen as a part of micro-economics, a big and important part, at least when discussing economics in relation to law. Welfare economics tend to be more philosophical than other areas of micro-economics, asking questions such as: Why is it this way? How can it be

²⁰ Cooter & Ulen, p. 9.

²¹ Ibid, p. 11.

²² Ibid, p. 44.

²³ Hildebrand, p. 140f.

better? etc., the overall question being how do decisions of individuals and firms interact to affect the wellbeing of individuals? Wealth and welfare are central concepts as well as the three concepts mentioned earlier under the presentation of micro-economics: maximization, equilibrium and efficiency. Wealth is measured in money; welfare is measured in utility units. By a voluntary transaction between rational beings both welfare and wealth increase. Wealth and welfare do not always coincide; this fact brings forth the question of what state of the society we should be pursuing.²⁴ Economic efficiency has to do with the production of wealth and not the transfer of wealth. Investments that are made only to transfer wealth are not efficient²⁵ and therefore do not produce social benefits.

3.1.3.1 Market imperfections

The market is often talked of in different contexts, but what exactly is the market? According to welfare economics it is a place where different utilities are reallocated through agreements between a buyer and a seller²⁶, in which equilibrium should be strived for. If equilibrium is obtained no actor on the market can make any change that favours both sides. Perfect competition exists when supply and demand meet. A perfect market can only exist if there are no market failures, but in reality there always seem to be; taking the form of monopoly, market power, public goods, externalities and severe informational asymmetries. To reach a perfect market situation market failures have to be abolished or diminished, one way of doing this is through legislation.

3.1.3.2 Property

A bundle of rights is what the legal concept of property means. That bundle of rights is what tells the owner what he or she may or may not do with their property. Perhaps most importantly the bundle of rights contains a freedom to exercise the right over owned property. No laws can ever forbid or require a property owner to exercise that right. Another important fact that comes with the bundle of rights is that no one else may interfere with the owner's exercise of his or her rights, in fact they are forbidden to do so.²⁷ Production efficiency is stimulated through property rights by internalization and through bargains and so is allocated efficiency. Property rights also create incentives for maximizing the wealth of society through protection and enhancement of voluntary transactions²⁸ and investments. Thus, efficiency, wealth and welfare are stimulated since voluntary transactions move resources from people who value them less to people who value those more. "Property rules involve a collective decision as to who is to be given an initial entitlement but not as to the value of the entitlement."²⁹

²⁴ Dahlman et al, p. 80.

²⁵ Cooter & Ulen, p. 121.

²⁶ Dahlman et al, p. 45.

²⁷ Cooter & Ulen, ,p. 74.

²⁸ Ibid, p. 113.

²⁹ Calabresi, p. 1092.

Property rights are discussed in regards to their creation, scope and use. IP law primarily put forth one main pro-argument in stating that individuals should be morally entitled to the fruits of their hard work. In addition IPRs prevents free-riding, which would be much more common without property rights.

In welfare economic theory a distinction is made between private and public goods. Public goods are distinguished by their non-excludability and the fact that they are non-rival in consumption. If there were no IPRs discoveries and inventions would in many cases have public good attributes.³⁰ Consumption of immaterial goods does not exclude others from consumption and if there is any rivalry it is limited. The initial costs of producing an immaterial good is often very high but the cost of reproducing, copying and distributing it is low. Hindering copying etc. is therefore tied together with high costs making it difficult to exclude anyone. This can lead to the problem that the producer, who cannot profit from the value of the immaterial good, loses incentives for going forth with the production, leading to a market that produces far less than the optimal quantity. The right holder keeps his/her incentives for producing since he/she can demand damages if someone use the immaterial good without permission. IPRs also facilitate the distribution of information and new knowledge making further innovations possible.³¹

Arguments against IPRs often involve the thought that they create market failures in the form of monopolies and, if the scope is too wide, leave room for too few substitutes. The right holder wants to maximize his/her profits and is likely to do this through high prices and lowered production. By acting this way the right holder makes further innovations more difficult to achieve. Since no one is allowed to produce the good without the permission of the right holder through e.g. a licence, innovations are put on hold.³² The positive effects are thought to be prevailing wherefore IPRs systems exist but are sometimes seen as second best solutions to the market failure.

3.1.3.3 Transaction costs

Economic efficiency creates wealth meaning that it brings satisfaction measured in money. Voluntary transactions increase wealth for both parties and thereby the overall wealth and welfare in society increase and voluntary transactions should therefore be encouraged.

Transaction costs can cause a problem when transferring property. There are two means of defining transaction costs according to Douglas W. Allen-which definition is to be used depends on what issue is being assessed. The first definition states that transaction costs occur when a market transaction takes place. The second definition establishes that transaction costs occur

³⁰ Langinier & Moschini, p. 2.

³¹ Dahlman et al, p. 174f.

³² Ibid, p. 177.

whenever any property right is established or in need of protection.³³ Three types of transaction costs are discussed in welfare economics; those are costs for contact, contract and control.³⁴ Transaction costs that are too high can quite possibly hinder important agreements and transactions from taking place, thus lessening the gains for society as a whole.

Asymmetrical information could increase the transaction costs and should be prevented. As with market failures, legislation can be a means to diminish or abolish transaction costs.

Economic rationality is presumed in the sense that individuals only make changes if the utility outweighs the costs. Companies are profit-maximising, as mentioned before, basing their choices on how their profit will be affected by that choice.³⁵ The Kaldor-Hicks criterion can be looked upon as a cost-benefit analysis; the transaction is efficient if the benefits are larger than the costs.

3.1.3.4 The Coase-theorem

The Noble price winner Ronald Coase stated that

“in a world where every individual acts with economic rationality and where no transaction costs exist, it does not matter how rights and obligations are distributed by legislation, since individuals always will make agreements that reallocates rights in order for each right to belong to the person who values it the most.”³⁶

The Coase-theorem represents an ideal picture of the market/world, which as has already been established does not exist, due to for example market failures etc. But a theory is a model of reality and can be adjusted in order to be used when assessing reality. Thus, the Coase-theorem does play a role on the real market. The normative consequence it brings to the market is that if the holder of a right is not the individual who values the right the most he/she will sell/transfer it to the person who actually does value it the most. The result of this being that transactions that increase wealth and welfare in society will take place due to the presumed economic rationality that every person acts from. From society's point of view it is vital that all rights are given to whoever is prepared to pay most for the right and thus value it the most. Through legislation society can aim at imitating the perfect world described in the Coase-theorem. Law and rules should give people the rights and obligations they would have had if every agreement and transaction increasing wealth would have taken place.³⁷

³³ Allen, p. 912f.

³⁴ Dahlman et al, 2004, p. 85.

³⁵ Ibid, p. 38.

³⁶ Ibid, 2004, p. 103, (translation by the author of the thesis)

³⁷ Ibid, p. 103f.

3.2 Competition theories

Competition can be defined and explained in several different ways, the following definition is the one closest to the way in which competition needs to be understood throughout this thesis;

“a process of responding to a new force and a method of reaching a new equilibrium.”³⁸

3.2.1 Competition in market economies

The basis of competition theory lies in the economic system that is prevailing. On the EU market and most other markets the economic system is based on the market mechanism, where free enterprises and competitive markets are in focus, creating the so-called market economy. The rationale behind the market economy is that competition provides society with benefits that are not accessible through monopoly. Legal control of competition policies and market structure are thought to be able to reduce potential damages caused.³⁹

Diffusing economic power and thereby protecting the freedom and rights of the individual is the goal of competition theory at large. More specifically this means the protection of the economic freedom of market participants. The more competitive a market is the more it promotes improved economic performance. This thought goes back to Adam Smith who found it vital to maintain and establish competitive market structures. When no restraints are put on the competitive forces and their interaction, the best allocation of resources will be achieved, which will take the form of the lowest prices in combination with the highest quality and the greatest material progress. Through this, the competitiveness and overall economic efficiency will be at its greatest, producing higher consumer welfare.⁴⁰

3.2.2 From a concept of freedom to an efficiency doctrine

Adam Smith one of the most prominent economists in classical theory, talked of an invisible hand that controlled the market mechanisms, leaving no room for interference from the state. In the classical theory competition is a concept of freedom enforcing a dynamic process consisting of action and reaction.⁴¹ A theoretical model of perfect competition was invented showing how perfect competition, comprehended as an existence of many distributors providing the market with homogenous utilities, would lead to economic efficiency. Monopoly is the opposite of perfect competition in the sense that it creates economic inefficiency and lets prices raise above

³⁸ Hildebrand, p. 109.

³⁹ Ibid, p.107.

⁴⁰ Ibid, p. 108.

⁴¹ Ibid, p. 110.

marginal costs and output, thus causing a decrease in comparison to a competitive situation. Real competition is in fact not perfect and the concept of workable competition derived from the theory of perfect competition dealing with the next best thing, attempting to develop conditions for economically desirable forms of competition.⁴² Clark, who actually was the first person to bring up the workable competition concept, later reformed this and started a discussion on effective competition.⁴³ Effective competition goes back to the thought in classical theory that competition is effective when it is able to work in an open and free market in a dynamic process. Following this theory was a new theory on contestable markets that emphasised the importance of having no barriers of entry to the market since that is the best way of eliminating monopolies and monopolies can thus not remain if there are no barriers of entry. The lack of barriers to entry creates a perfectly contestable market where entry is free and so are exits, i.e. everyone can compete on equal terms. This theory has been critiqued since it has a far too static view of how competition works and since it also comes very close to being only a theoretical model.⁴⁴ The Chicago school, to which for example Posner belongs, has established an efficiency doctrine, where focus is on allocated and productive efficiency creating maximized value.⁴⁵

In micro-economic theory a perfectly competitive industry exists when a decision of an individual customer cannot affect the market price, since there are so many customers. A monopoly can according to micro-economics only exist if there are barriers to entry, much the same thought as in the contestable market theory, however, these barriers can be of two kinds: legal restrictions and technological restrictions. Legal restrictions need no further explanation but technological restrictions do;

“Economies of scale are a condition of production in which the greater the level of output, the lower the average cost of production. Where such conditions exist, one firm can produce any level of output at less cost than multiple firms.”⁴⁶

Thus, a monopoly can exist; these monopolies are sometimes referred to as natural monopolies.

3.2.3 The competition goal on the common market

EC competition law has an efficiency goal of increasing wealth and thereby welfare. The competition rules have as their objective to enable and protect competition on the market. Markets are to be kept open and competitive where the greater good lays in the benefit for the society as a whole.

⁴² Hildebrand, p. 120ff.

⁴³ Ibid, p. 124.

⁴⁴ Ibid, p. 136ff.

⁴⁵ Ibid, p. 147f.

⁴⁶ Cooter & Ulen, p.31.

By furthering technological development competition law strengthens competition on the market. Competition law implements the Kaldor-Hicks criterion.⁴⁷ Markets where competition is found result in lowered prices, higher sales and faster technological development, which is known to stimulate competition and overall wealth and welfare of society. The overall goal can be summarized as being a free competitive market where no monopolies are allowed at the expense of free competition. National legislations and the EC law deals with competition problems, trying to imitate a perfect market with perfect competition setting out rules that are meant to reduce market failures.

3.3 The effect of technology transfer agreements on the market

In a broader economic context, licensing of IPRs is vital. Licensing agreements and thereby technology transfer agreements promote competition through dissemination of technology and knowledge. Dynamic innovation competition enforces technological development; it is therefore an important factor in creating wealth and welfare in society. Development through dynamic innovation is more flexible and up to date than static innovation, but static inefficiency during a short period can be outweighed if complemented by dynamic development in the long term.⁴⁸

The protection of competition in the innovation process is of importance and has an underlying economic rationale, since dynamic efficiency stimulates technological development the economic growth and welfare in society will increase. The incentives competition vs. IPRs given for R&D is weighed against each other. Technological agreements do improve the overall economic efficiency and are therefore pro-competitive for the following reasons; it facilitates diffusion, reduces duplications in R&D, strengthens the incentives for initial R&D, stimulates increased innovation and generates product market competition.⁴⁹ Those pro-competitive advantages may outweigh restrictions in the agreement or legislation, but it depends on the degree of market power the concerned undertakings hold and whether there is any competition from others owning substitute technology. Depending on the level of competition from substitute technologies even monopolists can feel threatened by competitors and thus have to continue improving their technology. This however will not be the case if IPRs are allowed too wide a scope making it almost impossible for other undertakings to legally distribute substitute technologies. If their substitute technologies invade the scope of the right holder's IPR, damages can be required.

⁴⁷ Dahlman et al, p. 156f.

⁴⁸ Ibid, 2004, p. 151.

⁴⁹ Lidgard & Atik, p. 227.

4 Legislation regarding technology transfer

Before going in to the specific regulation and guidelines for technology transfer agreements it is a good idea to go through article 81 of the EC treaty to understand the most vital competition rules concerning agreements. When assessing different agreements to find out whether or not they are compatible with the market the method is to go through article 81(1) and 81(3) EC and thereafter the block exemption in question. This method explains the outline of this chapter.

4.1 The EC Treaty

The EC Treaty has existed since 1954 but have during the course of time been amended, the latest consolidated version was adapted in Nice 2002. The main competition rules are found in article 81 and 82 EC, this chapter concerns article 81 EC.

4.1.1 Article 81 EC

Agreements that infringes article 81(1) EC are the ones that may affect trade, meaning that they have an anticompetitive objective or effect on the common market. Article 81(3) EC gives the possibility of exemptions from article 81(1) EC meaning that even though an agreement may be an infringement on article 81(1) EC it could be allowed thanks to article 81(3) EC. Both individual and group exemptions are dealt with in article 81(3) EC. Article 81(1) EC is applicable if an agreement or concerted practice affect trade between member states. It is enough that the effect is potential. Article 81(3) EC provides exemptions from the prohibition in article 81(1) EC. Earlier on the Commission granted individual exemptions but now a self-assessment under the block-exemptions is made. If reaching the conclusion that the agreement complies with the conditions for the grant of an exemption the agreement is automatically exempted and thereby lawful under article 81(1) EC. Block-exemptions in general exist due to the rationale that particular individual agreements has sometimes warranted exemptions because of the terms they have contained.

Guidelines on how to apply the conditions for an exemption are found in the 2004 Notice on the application of article 81(3) EC⁵⁰ as well as in the 2001 Horizontal Guidelines.⁵¹ When assessing a question regarding whether an

⁵⁰ Communication from the Commission, Notice, Guidelines on the application of Article 81 (3) of the Treaty (2004/C101/08) OJ C 101, 27/04/2004 (2004 Notice on the application of article 81 (3)).

⁵¹ Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements (2001/C3/02). (2004 Horizontal Guidelines).

exemption should be provided or not it is important to look at the individual case and its special circumstances since the guidelines are meant to be used with flexibility.

Horizontal agreements have to do with cooperation between competitors, which could possibly lead to competition problems but could also give ground for economic benefits. Article 81 is structured in a way that gives the possibility to take both anti-competitive and pro-competitive effects into account.

The block exemption for technology transfers is assessed in this paper. According to the 2004 Technology Transfer regulation horizontal technology transfer agreements regarding the manufacturing or provision of contract products, should not be assessed under article 81(1) EC during the lifetime of the IPR.

4.1.1.1 Direct effect of article 81 EC

According to article 1(1) in council regulation 1/2003⁵² agreements that are considered an infringement on article 81(1) of the EC treaty are to be forbidden if they do not fulfil the conditions set up in the exception rule in article 81(3) of the EC treaty. If the conditions are met the agreement should be allowed according to article 1(2) in regulation 1/2003. Due to regulation 1/2003 national authorities must apply article 81 EC when there might be an impact on the common market, thus article 81 EC has direct effect. Prior to the existence of this regulation, to be granted an exemption the undertaking had to apply to the Commission, but because of the direct applicability of article 81 EC today there is no need for this. No decision has to be taken in advance to allow for an individual exemption or not. Instead there need to be quite a bit of self-assessment from the concerned undertakings.

Since the notification system was abolished through regulation 1/2003 the question has become whether national authorities will be allowed as much freedom when assessing article 81(3) EC as was the Commission. What we do know is that they will not be allowed to decide against a ruling of the Commission. This was established in *Masterfoods*⁵³ and then put in article 16 of the regulation 1/2003. When the Commission was the sole authorised organ to assess these questions the individual exemptions granted were limited to a certain number per year and they had an end-date after which they had to be renewed. When an exemption is provided today it means that article 81(1) EC is not applicable from that day forth.⁵⁴ Whether this is an improvement or not is for the future to show. It used to be the case that the application for an exemption delayed the process but since the national

⁵² Council Regulation 1/2003/EC of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty. (2003 Council Regulation 1/2003).

⁵³ *Masterfoods Ltd and HB Ice Cream v Commission*, C-344/98, 14 Dec 2000, [2000] ECR I-11369, [2001] CMLR 449.

⁵⁴ V. Korah, p. 85.

authorities now are allowed to decide by themselves whether it is suitable to apply article 81(3) EC the process is much faster and there are advantages with the same authority assessing both article 81(1) and (3) EC since they both have to do with analysing competition.

4.1.1.2 The conditions in article 81(3) EC

Under article 81(3) EC we find four cumulative conditions. If one condition is not fulfilled there is no reason to keep going. But are the conditions to be assessed in a specific order or not? It should first be said that Article 81(3) EC is only relevant if the agreement already has been found to infringe article 81(1) EC, i.e. it is sort of a two-step analysis. Article 81(3) EC provides a possible defence for the restriction of competition put forth in the agreement. If we assume that an infringement has been proven we have to investigate whether it should be provided an individual exemption or not and why this is the case.

Firstly it has to be established that the restriction of competition that comes out of the agreement provides economic benefits or efficiency gains, such as contributing to technical and economic progress, which are benefits that have to be objective according to the Commission. The efficiencies also have to have a direct causal link to the agreement but this has more to do with the third condition. It is not enough that the parties of the agreement benefit from it since the second condition states that a fair share has to be passed on to the consumers. How big this share is supposed to be depends on the circumstances, but as stated in the guidelines it must at least not decrease the consumer welfare. It could of course be that even when prices are raised, society as a whole could benefit from the agreement, but still consumers should not be worse off due to the agreement. When discussing already existing products there cannot be an exemption if prices are raised, but for new or improved products it is different and the fourth condition becomes more important.⁵⁵ The third condition for there to be an exemption is that the restriction is necessary for the economic benefits to be obtained. If this can be done in another way there is no valid cause for the restriction of competition and no exemption will be provided for the agreement in question. Lastly, an agreement is never to be exempted if it eliminates competition; this makes it harder if not impossible for dominant firms to get individual exemptions.⁵⁶

The commission has said that it might be better to assess the third condition regarding indispensability before stating whether or not the consumer benefits from the agreement. Because if the restriction of competition is not necessary there is no need for further assessing the question, and no individual exemption will be granted.⁵⁷ If all of the cumulative conditions are met it is not possible to add further conditions to be fulfilled since the

⁵⁵ P. Nicolaidis, p. 136.

⁵⁶ 2001 Horizontal Guidelines, paragraphs 32-36.

⁵⁷ 2004 Notice on the application of article 81(3), paragraph 39.

conditions set out in article 81(3) EC are exhaustive, meaning that if fulfilled an exemption has to be granted.⁵⁸

4.1.1.3 Case-law and doctrine assessing article 81 EC

When assessing article 81(1) and (3) EC it is normally thought that some kind of balancing between anti-competitive and pro-competitive components should take place. The two-step analysis starts with establishing restrictions on competition in article 81(1) EC and then balances negative and positive effects of the agreement in article 81(3) EC. According to Kjolbye agreements can never decrease the consumer welfare and be exempted.⁵⁹ That article 81(3) EC is based on a “consumer welfare standard”⁶⁰, meaning that prices should not increase due to an agreement between undertakings, seems to be the view of both the Commission and Community courts.

When cooperation leads to cost efficiencies this should not pose a problem but if the efficiencies instead consist of for example quality improvement what happens then? Possible positive effects and benefits are not considered until assessing article 81(3) EC which was shown in *European Night Services*.⁶¹ It has been clear in case-law since *Van Den Berghs Foods*⁶² and *Metropole Television*⁶³ that no balancing takes place in the assessment of article 81(1) EC. Balancing pro-competitive and anti-competitive effects at this stage was clearly rejected by the CFI in *Metropole Television*. Nicolaidis seems not to agree. He says that there is the “balancing” between increasing competition through cooperation and weakening of potential competition.⁶⁴

If an agreement does not have as its objective to restrict competition on the relevant market it still has to be investigated whether there might be restrictive effects. Such an investigation calls for economic analysis in addition to legal assessment.

“Art. 81 (1) seeks to determine the overall, actual, potential and inter-temporal effect of an agreement on competition.(...)Art. 81(3) asks whether an agreement with an overall anti-competitive effect should be allowed to go ahead, because it generates sufficient gains for consumers.”⁶⁵

⁵⁸ 2004 Notice on the application of article 81(3), paragraph 42.

⁵⁹ P. Nicolaidis, p. 123f.

⁶⁰ P., Nicolaidis, p. 127.

⁶¹ Ibid, p. 128. *European Night Services (ENS) and Others v Commission*, cases T-374, 375, 384 & 388/94, 15 September 1998, [1998] ECR II-3141, [1998] 5 CMLR 718, [1998] CEC 955, appeal from Commission decision, 21 September 1994, OJ 1994, L259/20, [1995] 5 CMLR 76, [1998] CEC 955.

⁶² *Van den Bergh Foods Ltd*, 11 March 1998, OJ 1998, L246/1, [1998] 5 CMLR 530, [1998] CEC 2380, (T-65/98), 23 October 2003, [2004] 4 CMLR 14.

⁶³ *Métropole I-Métropole Télévision SA and Others v Commission* (T-528, 542, 543, 546/93), 11 July 1996, [1996] ECR II-649, [1996] 5 CMLR 386, [1996] CEC 794, appeal from EBU.

⁶⁴ P., Nicolaidis, p. 133.

⁶⁵ Ibid, p. 134.

Balancing in article 81(3) EC has been applied since *Grundig*.⁶⁶ Due to this balancing, individual exemptions can be provided only if there are sufficient benefits for society to be compensated for the restriction. Nicolaides does not believe that there is balancing in article 81(3) EC since if the prices are increased improvements of the product are almost always seen to outweigh the increased price. If there is no increase in price it does not even give rise to anti-competitive effects that can be balanced. This is why he considers article 81(3) EC to filter out certain anti-competitive agreements rather than weighing them against the pro-competitive effects.⁶⁷

In *Vaessen/Moris*⁶⁸ two clauses were found to be an infringement on article 81(1) EC. It consisted of restrictions of competition that did not meet the conditions in article 81(3) EC wherefore it could not be exempted. In *KSB/Gould/Lowara/ITT*⁶⁹ and also in *Ford/Volkswagen*⁷⁰ the Commission states that positive environmental effects could be a benefit for the consumer to share in enabling the undertaking to get an individual exemption.⁷¹ According to Korah this could be a problem since what should be considered are the benefits shared by the consumers of the relevant product and not the consumer in general.⁷² For example as in *Bayer/Gist-Brocades*⁷³ where the Commission found article 81(3) EC to be applicable since the agreement contributed to the technical progress by improving production, from this the undertakings expanded which was beneficial the consumers as well since there were more end-products to choose from. Obtaining this agreement was indispensable and it did not eliminate competition on the relevant market. This case demonstrates that when technology is advanced it can be beneficial to cooperate.

In a recent case from ECJ, *GmbH&Co.OHG v Commission of the European Communities*, T-328/03, the Commission was found to have made a faulty assessment on whether to grant an individual exemption or not. The ECJ stressed the importance of analyzing the individual agreement and its circumstances carefully. When applying the four conditions in article 81(3) EC it is of great importance that the same things are considered.

⁶⁶ *Consten & Grundig-Re the Agreement of Grundig Verkaufs-GmbH* (64/566/ECC, 23 Sept 1964, JO 2545/64, [1964] CMLR 489; appeal *Etablissements Consten SA and Grundig-Verkaufs-GmbH v EEC Commission* (56 & 58/64), 13 July 1966, [1966] ECR 299, (1966) CMLR 418.

⁶⁷ P., Nicolaides, p. 143f.

⁶⁸ *Vaessen BV v Moris and Alex Moris Pvbva* (79/86/EEC), 10 January 1979, OJ 1979, L19/32, [1979] 1 CMLR 511, CMR 10107.

⁶⁹ Commission, Decision 91/38/EEC, *KSB/Goulds/Lowara/ITT*, 12 December 1990, OJ 1991 L 19/25, [1992] 5 CMLR 55.

⁷⁰ Commission, Decision 93/49/EEC, *Ford/Volkswagen*, 23 December 1992, OJ 1993 L 29/14.

⁷¹ H H., Lidgaard, p. 160.

⁷² V. Korah, p. 14.

⁷³ *Bayer/Gist-brocades-Re the Agreements between Bayer AG and GistBrocades NV* (76/172/EEC), 15 December 1975, OJ 1976, L30/13, [1976] 1 CMLR D98, CMR 9814.

4.2 Legislative development for technology transfer block exemptions

Initially the Commission was in favour of licensing agreements explaining that such agreements did not fall under art 81(1) EC and there was no need to notify the Commission of contemplated licensing agreements.⁷⁴

The early group exemptions from 1984⁷⁵ and 1989⁷⁶ gave expression to a fairly strict approach concerning technology transfer. The block exemptions have often been referred to as promoting a formalistic straitjacket approach. Even though this formalistic approach might not have been the only reason for licensing agreements losing their appeal for the industry it is likely that the legislation has some blame in it. Vertical collaboration became more and more common which has a negative impact on the competitive market by reducing the number of actors and thereby concentrating the markets. To promote technological development a more permissive approach was needed.

The regulation from 1996⁷⁷ began this softening of legislation by treating know-how and patents alike. Though the regulation followed the same formalistic approach as the earlier group exemptions one significant change was adopted namely the introduction of thresholds for the market shares of the concerned undertakings.⁷⁸ However, this was not enough and after having evaluated regulation 240/96 EC during a revision in 2001, the need for further reform was apparent. The requirements were still too formal keeping the old straitjacket analysis which had been found to discourage the dissemination of technology and efficiency creating transactions. The evaluation particularly showed that effective competition must be ensured and that adequate legal security for undertakings should be provided.

Since the former Technology Transfer regulation 240/96 was neither practical nor up to date with current economic reasoning, a new regulation 772/2004 listing restrictions and clauses prohibited in technology agreements,⁷⁹ was implemented in May 2004 and coincided with the enlargement of the EU as well as the reform of merger control rules and procedural rules. The 2004 TTBER meant a modernisation for the TTBE and was more in line with the prevailing economic based approach of the Commission while also being largely in harmony with the US approach. TTBER regulates an important intersection between IPRs and competition

⁷⁴ H H., Lidgaard, p. 240.

⁷⁵ Commission Regulation (EEC) No 2349/84 of 23 July 1984 on the application of Article 85 (3) of the Treaty to certain categories of patent licensing.

⁷⁶ Commission Regulation (EC) No 240/96 of 31 January 1996 on the application of Article 85 (3) of the Treaty to certain categories of technology transfer agreements OJ No L 31, 9. 2. 1996.

⁷⁷ Commission Regulation (EC) No 240/96 of 31 January 1996 on the application of Article 85 (3) of the Treaty to certain categories of technology transfer agreements

⁷⁸ Ibid, p. 250f.

⁷⁹ H H., Lidgaard & J., Atik, p. 226f.

law, wherefore the view of technology transfer agreements has been changing over time; now that licensing agreements are thought to be promoting efficiency and being pro-competitive, the new TTBER has its main focus on the degree of market power. The notification system has been replaced by a self-assessment aided by block exemptions and guidelines. The new TTBE was adopted in April 2004, however, we have not seen much of what it will change in practice yet, but one question that e.g. Korah, already in 2004, posed was whether national competition authorities and courts will follow the regulation and its accompanying guidelines or not? Even though it has been three years since the TTBE came into force we still do not have a good answer to that question, especially due to the lack of case law.

4.3 2004 Technology Transfer Regulation

The reader should now feel familiarised with article 81 EC and its application, as well as the legislative development of the TTBE, wherefore it is time to move on to the technology transfer block exemption. The TTBER together with the guidelines explain if and what application article 81 EC has to technology transfer agreements. Since 1 May 2004 no individual exemptions are granted by the European Commission for specific agreements. Now a less bureaucratic system is brought forth asking the concerned undertakings to make a self-assessment to determine whether their agreement is exempted or not according to the TTBE, this new system based on self-assessment does bring about a greater uncertainty.

4.3.1 Purpose and goal

The benefit of a block exemption is that it makes agreements that fall within their scope per se legal. The new rules adopted intend to "focus on the economic effects of an agreement, rather than establishing templates of acceptable provisions for different types of agreement, as the old rules did."⁸⁰ The draft presented by the Commission for the new TTBER was heavily criticised and looked upon with suspicion. The main criticism was that based on how the draft was outlined, it would be bad for licensing as such not to stimulate competition, and in addition, the element of certainty for undertakings contemplating a technology transfer agreement was destroyed. To describe precisely what the goal of the regulation is it is better to quote what actually is written in paragraph 15 of the preamble:

"The market-share thresholds, the non-exemption of technology transfer agreements containing severely anti-competitive restraints and the excluded restrictions provided for in this Regulation will normally ensure that the agreements to which the block exemption applies do not enable the participating undertakings to eliminate competition in respect of a substantial part of the products in question."

⁸⁰C., Norall & R., Gerrits, p. 229.

If agreements within the scope of TTBER will show evidence of having effects on competition that are incompatible with article 81(3)EC the Commission withholds the right to withdraw the exemption. Such typical negative effects according to the guideline preamble paragraph 16 are when incentives to innovate are reduced or when access to the market is hindered.

4.3.2 Scope of TTBER

TTBER covers agreements that have as their primary objective the licensing of patents, know-how and/or software copyright for the manufacturing of goods or services. Other types of IPR may be covered but only if they are ancillary to the primary object, and only if the primary object of the agreement is exempted by the block exemption. IPRs that are not covered by TTBER should be assessed under article 81(1) EC, if they fall within the scope of article 81(1) they are prohibited and there by void. To fall within the scope of article 81(1) the agreement must affect trade on the common market and the more upstream the technology the more likely it is that the technology does so.⁸¹ Multiparty agreements are not covered, but “the Commission will apply by analogy the principles set out in the TTBE.”⁸² It could be possible that difficulties in determining whether an agreement falls under the scope of TTBE or another block exemption exist; to solve the problem the primary object test is used. If TTBE is found to be inapplicable the full application of art 81 EC is reinstated.⁸³

In summary the TTBE creates a “safe-harbour” for certain types of IP licensing agreements, between two parties, that do not exceed certain market share thresholds and do not contain certain clauses, so-called hard-core restrictions. An agreement needs to satisfy the conditions in article 81(3) EC in order to get the advantage of the TTBE. Generally speaking technology transfer agreements are positive for the market leading to improvements in production as well as in distribution. Technology transfer agreements also tend to allow a fair share of the resulting benefits to be gained by the consumers. To be exempted the agreement has to be indispensable to the efficiencies and benefits it brings forth.⁸⁴

4.3.3 Pro-competitive structure

Since there are many pro-competitive effects arising from all sorts of IP licensing the new TTBER, dealing with technology transfer agreements in particular, needs to be structured in a pro-competitive way as well in order to promote the benefits for the competitive market that results from the agreements. In this subchapter the intention is to show how this has been displayed in the 2004 TTBER.

⁸¹ C., Ritter, p. 162.

⁸² Guideline 40.

⁸³ C., Ritter, p. 172.

⁸⁴ TTBER articles 10, 11 & 13.

4.3.3.1 Market share thresholds

The most important changes that have been made since the former regulation of 1996 regards the distinction that now must be made between competitors and non-competitors. The distinction is to be made at the point in time when the licence agreement is concluded and based on whether the concerned undertakings would have been competitors or non-competitors in the absence of the agreement. There are two markets in which it should be determined whether the undertakings are competing or not: the technology market and the product market. The answer will differ and thus brings forth difficulties as to how the distinction is to be made; on the product market both actual and potential competitors are considered whereas the technology market only actual competitors are taken into account.⁸⁵ The difficulty in calculating the market shares of the concerned undertakings lies in predicting what the relevant market will be like in the future. The further away from being put on the market a product or technology is the more difficult the market is to predict and thereby also the relationship between the undertakings, i.e. are they competing or not? Lidgard puts it in this way:

“The closer a new technology/product is to the market, the easier it becomes to determine the relationship between the licensor and the licensee.”⁸⁶

In article 1.1.j TTBER the definition of competing undertakings is found, and this new definition states that undertakings are competing only if they could have competed in the absence of the agreement without infringing each other's IPRs. Prior to the new definition the Commission assessed the concerned undertakings ex-post the agreement. The ex-post analysis often came to the result that the concerned undertakings were competitors since there was almost always a potential risk of the parties becoming competitors in the future. The obvious problem with the ex-post analysis was that most agreements would then be regarded as horizontal due to the Commission determining the undertakings as competing not granting them an exemption, though in reality the parties of the agreement in many cases were non-competitors when concluding the agreement. Due to the new definition of competing undertakings most technology transfer agreements will be considered as being vertical, leaving room for higher market share thresholds and less strict hardcore restrictions.⁸⁷

Licensing agreements between competitors pose a greater potential threat to competition, as does every type of horizontal agreement, wherefore the TTBER sets out stricter market share thresholds for competitors than it does for non-competitors. Non-competitors cannot have more than a 30% individual market share while competitors cannot go over a 20% combined market share⁸⁸. The difference is striking and the thresholds are by many seen as fairly low. Völcker for example asks if this might not cause problems on a dynamic market. However, the new market share test is there

⁸⁵ TTBER article.1.1.h.

⁸⁶ H H., Lidgard, p. 252.

⁸⁷ V., Korah, p. 325f.

⁸⁸ TTBER art 2 & 3.

in order to reflect the change from a prescriptive list of do's and don'ts, leaving room for a wider perspective when observing the effects that the contemplated agreements actually might have on the market.⁸⁹ Market shares may of course change over time due to many different factors in the market and re-calculations and new assessments are to be done annually. Due to the direct effect of article 81 EC previously presented, anyone that feels in any way adversely affected by an agreement can invoke article 81 EC in order to show that the agreement is incompatible with EC competition law and therefore should be prohibited. The risk of being scrutinized in such an event will probably be enough motivation for concerned undertakings to take the demand for annual re-assessment seriously. In any case the undertakings are given two full years coverage by the TTBE after the year in which the thresholds were exceeded.⁹⁰

A problem with the relatively low market share ceilings as Korah sees it is the obvious fact that since R & D is expensive it has to be worth while to invest in R & D. R & D is most likely to be worth while if a large part of the market will be supplied with the technology/product evolving from the R & D⁹¹, which will probably not be the case with such low market shares that are allowed under TTBER. Another issue concerning this is the fact that many technology markets are highly concentrated to various degrees depending mainly on the height of the relevant technology, leading to the dilemma that there might not be any possible licensors and licensees with market shares that stay below the set thresholds. Will this situation possibly lead to an increased emigration of firms to outside EU? In the future it may be that Europe is supplied in high degree by export instead of being an exporter to other parts of the world.⁹²

When discussing market share thresholds it is appropriate also to go somewhat into article 7.1 TTBER which contains rules for parallel networks of technology transfer agreements. Parallel networks of technology transfer agreements are a phenomenon where several agreements cover more than 50% of the relevant market containing the same or similar restrictive effects. Such networks can easily pose problems on the market as it may very well hinder competition; a good comparison would be an oligopoly. In the parallel network the different parties may not collaborate but there is a risk that the effects of their agreements become the same as if they would have been collaborating. The Commission holds the right to supervise those networks and if necessary decide that the regulation is inapplicable to an agreement that is or will be a part of this network. The agreement then falls under article 81 EC where an individual assessment should be made.

4.3.3.2 Dominant position

Above the level of the concerned undertakings' market shares has been discussed, but what happens if the licensee is in a dominant position will be

⁸⁹ L., Fullwood & L., Kerr, p. 3.

⁹⁰ C., Ritter, p. 175.

⁹¹ V., Korah, p. 324.

⁹² Ibid, p. 324.

touched shortly upon here. The Court of First Instance at one point stated that the fact that an undertaking holds a dominant position does not in itself make it an abuse of that dominant position if the undertaking acquires a licence. Article 82 EC covering abuses of dominant positions can very well be applied to an agreement that benefits from a block exemption. In order to apply article 82 EC the Commission does not have to withdraw the block exemption. What can be learned from this is that even though it is not an abuse in itself for a dominant undertaking to acquire a licence undertakings in such positions definitely serve themselves the best by being careful in accepting exclusive in-licensing agreements.⁹³

4.3.3.3 Hardcore restrictions

Different sets of blacklisted clauses, so-called hardcore restrictions, apply depending on whether competitors or non-competitors are involved.⁹⁴ The rules for non-competitors are more favourable than those for competitors. If the parties to the licensing agreement are competing undertakings and the agreement is reciprocal the list of hardcore restriction is at its strictest. If the concerned undertakings were non-competitors at the time of the conclusion of the agreement the list of hardcore restrictions for non-competitors will continue to apply for the full term of that agreement even if they become competitors during that time. This is quite favourable and a question that could be raised here is whether this fact will make parties contemplating a technology transfer agreement decide on longer terms for the agreement than they otherwise would have - because they are suspecting they will become competitors at some point in the near future and otherwise will have a stricter set of hardcore restrictions to follow - and thereby postponing the less favourable rules?

For competing undertakings the hardcore restrictions are in summary price-fixing, output limitation clauses, market allocation and restrictions on using other's technologies. It is sufficient that the agreement contains one hardcore restriction in order for the agreement as a whole to become void and illegal, meaning that the existence of a hardcore restraint in the agreement prevents the application of the TTBE to all other provisions in the technology transfer agreement.

4.4 2004 Technology Transfer Guidelines

Throughout the guidelines the general view of IPRs and licensing tends to be positive. The Commission has had the intention of showing that they do not consider an inherent conflict between IP laws vs. competition law to exist; on the contrary the relation between them is complementary.⁹⁵ Both IPRs and competition law have the goal of enhancing consumer welfare and so forth, and innovation is essential in an open competitive market. The guidelines seem to have an explicit pro-competitive agenda but are they

⁹³ H H., Lidgard, p. 340.

⁹⁴ TTBER article 4.

⁹⁵ M., Glader, p. 91.

compatible with the TTBER, which is what will be discussed as we go through the guidelines in this subchapter. There is no presumption in the guidelines that IPRs and licensing agreements give rise to competition concerns.⁹⁶ Throughout the assessment of each individual case the pro-competitive efficiencies should be weighed against the negative effects on competition.

4.4.1 Compatibility with the regulation

The guidelines consist of detailed explanations of the rules set out in the TTBER. The explanations focus both on exempted provisions and provisions that are not explicitly exempted. In addition to these explanations the guidelines also contain criteria on how to assess agreements that by definition fall outside the scope of TTBER e.g. technology pools which fall outside the scope since more than two undertakings are involved. Sometimes the guidelines tend to go further than the regulation leaving the risk of conflict open. When applying the standards and rules in the guidelines it is vital to do so in the light of the circumstances specific to each case. Each case assessment must be based on its own facts wherefore the application of the guidelines should be reasonable and flexible in order to make sound judgements.⁹⁷

4.4.1.1 A second “safe-harbour”

In the guidelines an extra second “safe-harbour” is provided in the sense that agreements that otherwise would not fall within in the scope of TTBE can still do so if they can provide evidence for the existence of at least four other independently controlled undertakings providing substitutable technologies.⁹⁸ Important though is that there cannot exist any hardcore restrictions in the agreement. This second “safe-harbour” is explained by the fact that market shares not always reflect the degree of competition accurately.

One important reason for creating this extra “safe-harbour” as well as the safe-harbour that the TTBE already constitutes is of course that innovation is thought to be an essential and dynamic part of the open and competitive market economy that is pursued on the common market.

“Intellectual property rights promote dynamic competition by encouraging undertakings to invest in developing new or improved products and processes. So does competition by putting pressure on undertakings to innovate.”⁹⁹

To promote innovation and to ensure a well-functioning competitive exploitation thereof, both intellectual property rights and competition are needed.

⁹⁶ Guideline 9.

⁹⁷ Guideline 3.

⁹⁸ Guideline 131.

⁹⁹ Guideline 7.

Big and risky investments are often required in order to create IPRs and in order

“not to reduce dynamic competition and to maintain the incentive to innovate, the innovator must not be unduly restricted in the exploitation of intellectual property rights that turn out to be valuable.”¹⁰⁰

In the short term there might be a contradiction between static efficiency, meaning low prices, and dynamic efficiency, meaning innovation, but in the long term they are likely to coincide.

4.4.1.2 Competing undertakings

Potential competitors are not taken into account on the technology market in which the licensor and the licensee are active.¹⁰¹ If A produces from a self owned technology, which they are not out-licensing, at the same time as B owns a substitutable technology but does not produce it, B can license their technology to A without them being considered competing undertakings.¹⁰² If they become competitors after the agreement has been concluded, that is if B starts producing as well, they will still be considered non-competitors for the full term of the agreement according to guideline 31, which elaborates on article 4.3 TTBER. Another way for competing undertakings to avoid being considered competitors is if they own one-way or two-way blocking patents, in which case the mere ownership of these patents will make them non-competitors according to the TTBE.¹⁰³ Blocking patents should be understood as technologies that cannot be exploited without infringing upon another technology. It is up to the parties to provide the evidence to show that the patents are blocking and that they should be regarded as non-competitors. Undertakings which have been competing up till the point where one of them made a drastic innovation that rendered the other undertaking's technology obsolete will be considered non-competitors as well if the situation is clear at the time of the agreement.¹⁰⁴

4.4.1.3 Inter-technology or intra-technology competition

In guideline 12 a distinction between inter-technology and intra-technology competition is made. Two questions are to be asked the first one regards inter-technology and asks whether the license agreement restrict actual or potential competition which would have existed if the agreement did not. The second question is posed in regards to intra-technology; does the agreement restrict actual or potential competition that would have existed if the contractual restraints of the agreement did not?¹⁰⁵ Within the EU the principle of proportionality prevails in regards to how parties only may restrict intra-technology competition in as much as it is needed to be able to

¹⁰⁰ Guideline 8.

¹⁰¹ Guideline 66.

¹⁰² Guideline 115.

¹⁰³ Guideline 32.

¹⁰⁴ C., Ritter, p. 174.

¹⁰⁵ M., Glader, p. 92.

conclude the agreement.¹⁰⁶ Inter-technology restrictions should not be exempted because if they were, one right holder would be allowed restrictive licence terms at the expense of another technology.¹⁰⁷

4.4.1.4 Excluded restrictions

In addition to the hardcore restrictions found in TTBER there are some excluded restrictions as well found in TTBER¹⁰⁸ and further explained in the guidelines. These restrictions consists of four additional categories of restrictions which are not in themselves thought to be anti-competitive but they need however to be individually assessed if they are included in a technology transfer agreement.¹⁰⁹ The biggest difference between these excluded restrictions and the hardcore restrictions in the TTBER are their impact on the legality of the technology transfer agreement. If an agreement contains a hardcore restriction the entire agreement as such falls out of the scope of the TTBE, whereas an agreement containing an excluded restriction still falls within the scope of the TTBE with the exception of the term to which the excluded restriction applies- this term is unenforceable.

Even if an agreement falls outside of the scope of the TTBE it is not by necessity illegal since there is still a possibility that it will be covered by an individual exemption in article 81(3) EC. The Court of First Instance ruled in *Matra*¹¹⁰ 1994 that there are no anti-competitive conducts which, if all the conditions in article 81(3) EC are fulfilled, cannot be exempted.¹¹¹ The observant reader might have noticed that earlier on in this thesis it has been stated that such individual exemptions no longer are granted by the Commission. This is still true and explained in guideline 14, namely that the parties are no longer able to submit the agreement to the Commission for approval, but instead the parties make a self-assessment under article 81(3) EC as well as under the TTBE in order to see if the agreement is compatible.¹¹² If the parties carry on with an agreement that is incompatible with the EC treaty, they will probably face an investigation later on, which is probably not in their interest wherefore it gives some guarantee that they will take the self-assessment seriously.

¹⁰⁶ Guideline 12.b.

¹⁰⁷ C., Ritter, p. 167.

¹⁰⁸ TTBER article 5.

¹⁰⁹ L., Fullwood & L., Kerr, p. 6.

¹¹⁰ Judgment of the Court of First Instance (Second Chamber) of 15 July 1994. - *Matra Hachette SA v Commission of the European Communities*- Case T-17/93. ECR 1994 Page II-00595.

¹¹¹ C., Ritter, p. 168.

¹¹² L., Fullwood & L., Kerr, p. 7.

4.5 Relations to welfare economics

Legislation, regulations and legal principles exist in order to work as instruments in the effort to further the economic efficiency in society.¹¹³ Economic efficiency is pursued since it creates wealth. When people act in an economically efficient way their personal wealth grows which in turn makes the overall wealth of society greater. To further wealth it is important to create possibilities for voluntary transactions, and this is where legal systems come in. In addition to creating these possibilities it also protects the established transactions.¹¹⁴

Licences and technology transfer agreements can potentially have an adverse effect on competition as has been discussed previously in this thesis. The logical rule of thumb seems to be that restrictions of competition can only be accepted in so far as it is necessary to safeguard innovation. While applying this rule to the assessment of an agreement it is vital to keep in mind that R & D as well as innovation does not solely depend on competition and IP law, rather it depends on several other factors as well.¹¹⁵ In fact many people do believe that the main incentive to innovate is simply the prospect of large profits in the future. Either way, the fact remains that

“in any IPR licence, the licensor will want to include restrictions on the licensee in order to protect the licensor’s rights and also to maximise the return on the investment in creating the intellectual property.”¹¹⁶

Why this is so falls back on the reasoning regarding the fact that all individuals are maximisers of some kind trying to further their own wealth.

The European market, the common market, is changing mostly due to the enlargement of the European Union; new member states bring new possibilities as well as difficulties, depending on e.g. their national legislations and traditions. An increase in technology transfer agreements can only work well if it can be guaranteed

“that business and authorities are able to operate under the same competition policy in the enlarged European Union and to make European markets more open and competitive in order to foster sustainable growth.”¹¹⁷

IP licensing tends to have positive effects on the competitive market and is important for economic development. While allowing for integration, the use of complementary technologies and the dissemination of technologies IP licensing promotes consumer benefit. The potential restrictive effects that IP licensing can create are actually created by the conditions set out in the

¹¹³ Dahlman et al, p.65.

¹¹⁴ Ibid, p. 78.

¹¹⁵ C., Ritter, p. 164ff.

¹¹⁶ M., Turner et al, p. 273.

¹¹⁷ P., Lowe, p. 584.

licensing agreement, wherefore in order to promote and safeguard competition it is vital that these are not too onerous or far reaching.¹¹⁸

As discussed in chapter two, strong grant back clauses of IPRs can be a problem in that they reduce the incentives for innovation when it is one-sided and also diminish competition in the market. Even so the fact remains that a grant back clause can be an incentive for innovation as well in regards to licensing agreements. The Commission has therefore chosen to permit obligations in technology transfer agreements to feed or grant back non-exclusively if the obligation is reciprocal. Korah believes, and I agree with her, that there probably will be less licensing if no grant back obligations are permitted.¹¹⁹ This would be a negative outcome since innovation fosters competition and a free, open and competitive market is the goal of the European Union and competition law.

¹¹⁸ M., Turner et al, p.274.

¹¹⁹ V., Korah, p. 330.

5 Analysis

The discussions in regards to what the relationship between IPRs and competition law really consists of have gone on for a long time and are not likely to end here. This thesis is another contribution to the debate concerning which interest should be favoured. Technology transfer agreement is an important issue in the area of competition law as well as in IP law wherefore it is a good subject from which to start the analysis. The common market and EC law have a goal, namely an open and free competitive market, and while striving for this goal, new legislations and regulations are bound to appear in order to improve the chances of reaching that goal. In 2004, a reform took place regarding areas in competition law, e.g. the new merger regulation and the new TTBE that has been the basis for this thesis.

5.1 Welfare economics

When assessing competition law issues it is always easy to fall back on economic theories since they are interlinked with the market and the competition issues of the market. Economic theories make lawyers see further than the legislation often does, and especially welfare economics are useful when grasping and assessing competition issues. The TTBE guidelines are aiming at being pro-competitive and showing how negative effects of IPRs and licensing agreements in general often is outweighed by their pro-competitive effects. Welfare economic vocabulary is used to a substantial extent in the guidelines but it is never explicitly stated that the theories in welfare economics are the ones being used, instead it is mentioned that an economic-based assessment is to be made in each and every case. When reading and assessing both the regulation and the guidelines it is not in any way obvious that welfare economics actually is used to any significant extent. The reason why I would say that it is best to have a welfare economic perspective even if it is not explicitly required is because it can be tacitly understood, when considering the goal of the common market, that welfare economics actually have a great role to play in regards to the TTBE. Welfare economics are based on theories of how to promote welfare and wealth in society which is exactly what the EU claims to strive for.

5.2 Regulation and guidelines

The old TTBER had a so-called strait-jacketing effect making the concerned undertakings trying to draft their agreements in accordance with the black, grey and white listed clauses found in the TTBER. By following the lists of do's and don'ts the undertakings hoped to avoid any competition concerns. The new 2004 TTBER calls for a more economic assessment of likely pro-competitive and anti-competitive effects that the agreement might have on

the relevant market. Difficulties are likely to arise with the self-assessment that the undertakings now have to make; difficulties can also exist in defining the market and calculating market shares accurately. The distinction that is to be made between competitors and non-competitors can be hard to make in cases where no certainty exists. None of the mentioned difficulties would be possible to overcome without clear and explanatory guidelines.

The overall impression of the regulation is that it is fairly short and concisely written containing only 11 articles. Without the aid of the guidelines it might be difficult to grasp the significance of the regulations. The guidelines are perhaps then a bit too concerned about trying to show off the pro-competitive effects that licensing agreements in general have. It might of course be helpful for the lawyers and firms that will apply the regulation and guidelines to get an overall picture, but the guidelines in my opinion could be more in compliance with the structure of the regulation to facilitate the comprehension of the regulation. In suggesting this I am aware of the fact that one of the tasks that the guidelines have to perform is to explain the application of article 81 EC on licensing and technology transfer agreements. The explanation is very well written and concisely detailed where it needs to be, thus for someone who has no experience in applying article 81 EC to licensing agreements reading the guidelines, at least the first sections will be very beneficial. The approach chosen in the guidelines probably depends on the same type of reasoning that was made in this thesis when starting out the presentation of the legal rules regarding technology transfer agreements by a thorough run through of article 81 EC as it is the basic rule regarding agreements in competition law. From where I stand, having chosen the same approach for this thesis as the Commission did for the guidelines, not much criticism can be made on this point.

5.3 Potential abuses of the TTBE

An agreement complies with EU competition law if it is a technology transfer agreement in which the concerned undertakings, the two parties, have market shares that stay below the thresholds set out in the regulation. The agreement may not include any hardcore restrictions and none of the derogations in the regulation are to be applicable to the agreement. There are a few articles in the TTBER that actually open up for concerned undertakings to abuse the legislation and potentially work against the competition goal of the common market.

5.3.1 Non-competitors becoming competitors

Several times in this thesis I have mentioned the goal of the common market to be a free competitive and open market. This is a common goal for the European Union as an institution, but it is questionable if it is the goal of individual undertakings within the EU, maybe for some it is but it is more likely that for most firms and companies the most important goal is to make profits while holding large market shares. The gap between the goals that

undertakings vs. the EU are striving for is potentially hard to overcome. With the risk of seeming overly suspicious, does there not exist a likelihood that companies will abuse the legislations when they make self-assessments, and thus take advantage of the beneficial regulations while ignoring the restrictions? Another means in which undertakings may abuse the TTBE is by concluding the agreement when they are non-competitors fully aware of the fact that they in the near future will become competitors on the relevant market, thus benefiting from the less strict regulations applied to non-competitors in the TTBER for the full term of the agreement. This is in my point of view a potential threat to competition since it ought to restrict competition when treating some undertakings more beneficially compared to those who actually were modest in their assessment determining themselves to be competitors since they knew they soon would be and did not want to take advantage of the more favourable rules. This latter scenario might not be completely plausible since it seems more rational for the undertakings to want to benefit from the more favourable rules and doing everything they can to actually do so, but still there must be room left in this analysis for the possibility of the mentioned scenario.

5.3.2 Exceeding market share thresholds

Another questionable benefit that can be given undertakings that have actually have fallen outside the scope of the TTBE some time into the term of the agreement is the one offered in article 8.2 TTBER. The article grants undertakings that have exceeded the allowed market share threshold an exemption for a period of two extra years counted from the day when they exceeded the threshold. This is particularly favourable for concerned undertakings that might have exceeded the threshold as well as becoming competitors, though they were non-competitors at the time when concluding the agreement in question. By the grant in article 8.2 their combined market share can hypothetically be more than 10% higher than the allowed combined market shares for competing undertakings which is 30%, since they as non-competitors were allowed to hold individual market shares of 20%. The potential risk of distorting competition is very much based on the same assumption that was made in the previous paragraph, namely that giving benefits to some undertakings creates a favourable position for these undertakings making it easier for them to operate on the relevant market and becoming too strong actors leading to dominance issues.

5.4 Problems with the self-assessment

By now it ought to be clear to the reader that no application is made to the Commission in order to be granted a group exemption under TTBE instead the responsibility is put on the concerned undertakings that need to make a thorough self-assessment in order to see if their agreement falls within the scope of the TTBE. As already discussed in the previous subchapter 5.3 there might be potential problems with this self-assessment creating risks that might distort competition on the common market. The issues addressed in subchapter 5.3, are fairly specific and related to particular articles upon

which the TTBE is built. It is now time to move forth to the general problems that the self-assessment might potentially cause. In fact, the issue with regards to the self-assessment though introduced as the biggest novelty from the Commission in it's striving for the competitive goal, might actually be the biggest problem with the new TTBER and guidelines.

5.4.1 Objectivity

Making a self-assessment might be difficult for many different reasons; the most important being the problem to stay objective when it is your firm that is involved. Even if hiring a lawyer outside the company that lawyer, though being objective, is still working for the firm and the firm is the one who will pay him to make the best of the situation for the firm. This last statement might seem cynical to some readers but it is very likely to be true in many cases where the lawyer finds it hard to remain completely objective.

Facts always need to be straight and should have a clear objective and independent status. With self-assessment the risk of subjective evocation of an objective fact is likely to be higher than in other situations, in large part caused by the difficulties in being neutral.

5.4.2 Unqualified analysis

A self-assessment can very well be compared to any analysis that needs to be done within a company when deciding on strategies etc. The problem with the TTBE is that there is a risk that the self-assessment will turn out to be nothing but an unqualified analysis since there is no control of it. A well-made analysis starts by taking apart the elements and arguments that are involved in the issue that is to be analysed, but it is never enough to simply take something apart; it needs to end up in a synthesis answering the question of what becomes of the parts when they are properly analysed. The analysis is preferably built on good and sound arguments clearly stating what premises have been used in order to reach the conclusions made. Perhaps the concerned undertakings will make a proper analysis but still there is, except for the possibility that someone complains in accordance with the direct effect of article 81 EC, no one to control whether the analysis is sincere and right.

The lack of control can, as I see it, pose a problem because of what was mentioned above and also because a good argument of which the self-assessment ought to be built on should not just be spoken; it should also be showed to be sound. Since there is no control there is not any requirement to show that the agreement actually falls within the scope of the TTBE. One could even be so blunt as to say that there is not even a requirement to say that the agreement does fall within the scope of the TTBE. The self-assessments seem to be permitted to be made in the shadows instead of out in the light making it easier to make false assumption leading to false conclusions about the rights for exemptions.

Argumentation and analysing should in as little as possible lead to too many assumptions, and instead focus on discovering the truth. Will the parties be sincere and truthful in their self-assessments if they stand no risk of being controlled?

5.4.3 Lack of certainty

Self-assessment contains an element of uncertainty and insecurity. Even though there is no formal control following up the self-assessment made by the concerned undertakings, the risk of being scrutinized under article 81 EC, since anyone can complain in regards to the undertakings agreement being incompatible with the competition goal remains. This potential investigation might act as a deterrent leading to fewer technology transfer agreements taking place, thereby reducing the incentives for innovation and harming competition. Certainty is vital for the undertakings to feel secure in the self-assessment situation, but this certainty seems, as we know by now, to have been overlooked in the TTBE. The lack of certainty might even pose a threat to the function of the entire TTBE if too few arguments are concluded, and the interest of licensing is reduced on the market. In such a case the scenario is the same as it was back in the 1980's when the formalistic approach of the old block exemptions made licensing agreements loose their appeal to the industry. The cause was not the same then as it is now but the result seems to correspond.

In summary, there are two potential threats against the function of the new TTBE; the direct effect of article 81 EC and the uncertainty brought by the self-assessment and lack of control thereof possibly create hesitance in judging the agreement as exempted in accordance with the TTBE without receiving an approval from the Commission.

5.4.4 Other possible risks with self-assessment

In making the self-assessment it seems quite plausible that the concerned undertakings take on a too optimistic attitude in regards to their drafted agreement thereby increasing the risk of making the mistake of being naively optimistic. Naïve optimism tends to further false assumptions making the assessment or analysis unclear and untrue. The opposite situation might also be the case; the undertakings can be too modest or uncertain and therefore make a too pessimistic self-assessment which creates the same effect as in the case of naïve optimism.

The parties of the technology transfer agreement that is to be assessed may also find themselves feeling sceptical towards their agreement, the self-assessment or the TTBE as such. Scepticism is not a problem as long as it does not become a permanent attitude since it may then lead to wrong conclusions. Agnosticism in the sense of lacking enough knowledge regarding the issue in particular to be able to make a definite judgement about it, can possibly cause the concerned undertakings to simply ignore the TTBE since they do not find themselves in a position to make a valid self-

assessment. Agnosticism is generally not a problem if it is honest, whereas if it comes from laziness it constitutes a problem and in regards to the TTBE it might reduce the number of technology transfer agreements concluded, which is not a scenario that is wished for.

5.5 The lack of case-law

As has been brought up earlier in this thesis there has been no case-law of any particular interest after the reform took place, but why this is the case is open for speculation. Perhaps it is simply the case that there have been no self-assessments rendering any problems so far, if that is the sole reason there is no actual problem. Another possible cause might be that there have not been any self-assessments made due to the fact that it is too difficult to know exactly how to go about the self-assessment without risking the investigation that the direct effect of article 81 EC can bring about. It could also be the other way around, meaning that no one comprehends the reformed legislations well enough to know that it is possible to complain under article 81 EC, leaving faulty exemptions in peace.

6 Conclusions and final remarks

I will wrap up this thesis by discussing the conclusions that can be drawn from the analysis. The starting point of this thesis was the potential risk that the Commission had not been able to draft a completely problem-solving new TTBE in order to reach the competition goal. As I have gone through the incentives and risks in technology transfer, trying to apply the new TTBE legislation, I have in my analysis already put forth criticism in these regards, and it seems as though the new TTBE has succeeded in the sense that it can no longer be referred to as having a straitjacketing approach, however, new varieties of the problems have arisen. It seems to me that the effect today might not be straitjacketing but impeding, and the risk of a reduced number of technology transferring agreements threatening a well-functioning common market. In the introduction I presented the fact that there have been discussions for a long time regarding the intersection between IPRs and competition, the issue often being whether IP law or competition law should be favoured over the other. I do not intend to claim that I know the answer to this, in fact I do not think anyone really has the answer, but what I do believe is that the best solution would be the same one that has been in production for some time, namely to strike a balance between the two as a means of obtaining a well-functioning common market with workable competition.

The overall and common goal is to promote competition as have been mentioned several times in this thesis, but since according to welfare economics firms are profit-maximizing, competition might not be their strongest interest wherefore the legislation needs to strike a balance in which competition still is promoted but without the firm losing incentives to innovate and produce. I do not believe that the TTBE necessarily fails on this point, since the rules are quite favourable if overlooking the fact that many seem to think that the market share thresholds are too low. The failure concerns the uncertainty that the self-assessment possibly creates leaving room for a Wild-West situation where the undertakings contemplating agreements completely overlook the requirement of self-assessment and concludes the agreement anyway though it would not have been exempted under the TTBE had the self-assessment been made. Of course they are still at risk of being investigated if someone complains in accordance with the direct effect of article 81 EC claiming that the agreement is restricting competition. The risk is there but how big is that risk, especially if the agreement is not very far from actually falling within the scope of the TTBE? Is the possibility of complaining to the Commission actually used to any particular extent or is it just for show? Another plausible scenario would be that self-assessments are not made truthfully and sincerely in order for the agreement to be exempted even though it should not be if the self-

assessment was correctly made. I do believe it is obvious that some sort of further control of the self-assessments is needed.

Is there another way in which the evaluation on whether the agreement should benefit from the TTBE or not can be done? My suggestion would be that, if possible still leave the assessment up to the concerned undertakings but add a requirement for the undertakings to submit an argumentative report to the Commission arguing their case and reaching a conclusion as to why their particular agreement falls within the scope of the TTBE and therefore should be exempted. The formal decision would then be made by the Commission who has managed to lower its workload by leaving the evaluation up to the concerned parties and only keeping a controlling role. This way only an approval is sought and no application for an assessment made by the Commission is submitted. I do believe that such a procedure would outweigh the uncertainty created by the self-assessment. There could of course still be the risk of the parties making insincere and untruthful statements in their reports in order to get the agreement cleared by the Commission. This risk might however not be too imminent and the undertakings would in any case have to put some effort into arguing their case in order to get the agreement exempted, however it seems unreasonable that too many undertakings, profit-maximizing entities, would go to any lengths in arguing a false case, especially since arguments preferably should consist of a conclusion, i.e. a categorical statement, showing that something definitely is the case and certain knowledge therefore should be provided. The entire purpose of an argument is to produce a true conclusion as well as to persuade an audience, and when having to do this the parties might very well perform better in making self-assessments.

An important issue that might be contributing to the uncertainty is that welfare economics are used in the TTBE legislation in the way that concepts and terms derived from those theories are put into the text but they are unfortunately not explained. Many of these terms can tend to be vague wherefore it would serve an important purpose if they were properly defined in the guidelines. The wish for a more economic assessment will be much easier to live up to if definitions and explanations are made, especially if the assessments are to be correct in the end. Even using a lawyer for the assessment is not necessarily sufficient since not all lawyers may be familiar with welfare economics to the extent required.

The new TTBE is claiming to be pro-competitive in its structure which helps furthering the pro-competitive effects of technology transfer agreements, but as we have seen in the analysis there are many elements in the TTBE that create the opposite effect. One goal that the new TTBE was to fulfil was to make it more flexible than the former TTBE. In many ways, the new TTBE has succeeded, which is positive. Every situation is unique and attention is required to find the little things that lead to the big things, meaning that in order to make a correct judgement it is important to focus on each case individually, and this is promoted in the new TTBE.

Though claiming to strive for a better competitive as well as innovative market stating that technology transfer agreements contribute to the wanted market conditions, the Commission might have cut themselves short in making rules that because of being unclear create uncertainty and difficulties as to how they are to be applied. The difficulties could possibly exist due to the fact that the TTBER is as short as it is static, and even if the guidelines provide further explanations it might not be sufficient in regards to every particular case and this can lead to problems when the undertakings make self-assessments. If as discussed earlier this brings forth a risk of a reduced number of technology transfer agreements being concluded one cannot possibly say that the TTBE measures up to its stated ambition and purpose.

Sometimes we do not know the cause of everything, but what we do know is that everything does have a cause. I have mentioned a few times the lack of case-law after the reform in 2004; it would be quite interesting to see an investigation as to what this fact depends on. Is it as I believe the insecurity that the self-assessment brings or is the legislation simply regarded as too complicated?

Every time a problem is identified someone will want to try and solve it and the risk when trying to improve something is that the focus stays on the pressure to “do something” and results in the common mistake of settling for quick fixes, while the basic problem remains. If we see A- B-C as a chain where A is the source of B and B is the source of C, it is very likely that we overlook the fact that since A is the source of B and B is the source of C, A is essentially also the actual source of C. Regardless of what the problem is with C, the root of that problem is found in A and therefore it is A that should be scrutinized and improved. Instead the focus tends to be on B and it becomes impossible to address the core of the problem. This might actually be the mistake made in the new TTBE. If C stands for the lowered interest in technology transfer agreements that was detected in the 1980s, and B stands for the straitjacketing approach that the old TTBE was accused of, while A stands for the real problem, it is possible that because of the discrepancy between the goal of the common market and the individual goals of undertakings, the Commission failed to realize that the root of the problem was found in A, and instead chose to work on the TTBE legislation trying to make it more flexible thereby ignoring the problem of reduced interest in technology transfer agreements, because by improving the TTBE the hope was to come closer to the goal of a free, competitive and open common market. Not disregarding the work done by the Commission and acknowledging the fact that the new TTBE does present some improvements the fact remains that the root of the problem remains essentially unchallenged.

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