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Abuse of Dominance The Microsoft Litigations A Comparative Analysis

Economics is a science with excellent tools for gaining answers but a serious shortage of interesting questions... Stephen J. Dubner Freakonomics ... how about antitrust?

Preface

The present thesis was carried out under the supervision of Prof. Constantine Stephanou, Panteion University, International & European Studies Department. It is structured per the Rule-Based Reasoning Syllogism. Murray (2006), 95.* This particular format addresses the discussion of a single question presented at a time and it gets duplicated one or more times in order to address multiple questions. The researcher is thus instructed to introduce a Thesis on the issue, provide the Rule that governs the issue, Explain this rule and instruct the reader about how the rule is interpreted and applied, then Apply the rule and conclude with a Thesis. This format is referred to as TREAT.

The *Microsoft Litigations* features one main TREAT on the general question of the antitrust law, which governs dominance, and also two sub-TREATs in Chapter 4, which deal with the respective litigation proceedings – one for the US and one for the EC.

Goetz's and McChesney's *Antitrust Law* as well as Elhauge's and Geradin's *Global Antitrust Law & Economics* played a pivotal role in the completion of this paper. They served as a guideline for further research in the maze of US and EC *in re* case-law. At the same time Bork's *Paradox* provided well-founded economics critique on the "urban myths" that haunt antitrust regulation, almost 120 years after the original enactment of Sherman Act. Although of an age, this book is still up-to-date and its translation would undoubtedly enhance the perception of competition law in Greece.

The Bluebook provided a uniform system of citations in order to avoid the unpleasant variety of citation formats. The use of the words "antitrust", "antitrust law" and "competition law" are mostly used within their relevant context.

Why the Microsoft cases? My interest in the antitrust prosecution of the Microsoft Corporation arose after I came across the relevant US cases during my Antitrust Law class, when at the University of Illinois, College of Law. I was mostly surprised by the treatment US courts reserved to the firm; arguably *unfair* and without the dominant economic paradigm. That was for certain pieces of legislation, allegedly aiming at the protection of free-enterprise, unfettered competition or efficiency seemed not to act in that direction at all. Instead, they seemed to protect competition at other policy objectives' expense, e.g innovation's, or even protect competitors over competition. Finding out whether this much intuitive and spontaneous conclusion was true, was what drove me to dig into the peculiarities of the US and the EC competition law. In any case,

Last, special thanks to Celina Grigoriadis, whose help with the formatting and the page set-up, was invaluable.

^{* &}quot;The answer is X because the authorities establish the rule that governs this situation, and the rule requires certain facts to be present, and these facts are present, so the application of the rule to the facts produces X result." Id.

The Microsoft Litigations

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ABBREVIATIONS

API Application Programme Interface

CPU Central Processing Unit

CFI Court of First Instance

DC District of Columbia

DoJ Department of Justice

DDI Device Driver Interface

ECJ Court of Justice of the European Communities

FTC Federal Trade Commission

IAP Internet Access Provider

ICP Internet Content Provider

IE Internet Explorer

IPR Intellectual Property Right

ISV Independent Software Vendor

IT Information Technology

NCA National Competition Authority

NFL National Football League

NSP Native Signal Processing

OEM Original Equipment Manufacturer

OS Operating System

SME Small and Medium Enterprise

WMP Windows Media Player

Chapter 1: The Objective

No court should impose a duty to deal that it cannot explain or adequately and reasonably supervise.

Phillip Areeda.

[I]t is the duty of the court to prescribe relief which will terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation and ensure that there remain no practices likely to result in monopolization in the future. Charles Wyzanski, District Judge for United Shoe.

The present paper has three major objectives: (a) to offer a broad overview of a specific area of antitrust law, (b) to highlight the basic differences and similarities between the two most important jurisdictions in the field and (c) to examine the theoretical consistency of the law to the dominant economic paradigm – at least that of the developed free-market economies.

The Sherman Act § 2 and TEC Art. 82 violations, that is alleged monopolisations and abuses of dominant position, offer a better point of view of the competent legislations, than their equivalent pure antitrust provisions - §1 and Art. 81. This is because oligopolistic markets, most of the times organised around a market leader/dominant firm, are by definition lagging behind perfect competition. Thus the regulator's intervention focuses on the overall structure of the market rather than on a specific agreement, which works more or less in more competitive market.

This was the case of our defendant, Microsoft. For historic reasons that go back no further than 1981 and have to do with certain business choices and with the proper market structure, the firm acquired a quasi-monopolistic position with a devastating market share of 95%. Despite its niche character, it was this particular market structure that entailed this kind of major antitrust intervention within roughly 10 years from its birth. Microsoft, which in 1981 launched the first mass production model of a PC and actually created a brand new market, got all US antitrust regulators after it. They charged the firm of allegedly abusing the dominant position it acquired in such a short period of time. How did they treat the leader of such a booming and highly volatile market?

The differences or the similarities of that treatment in particular and of antitrust regulation in the US and the EC in general were another focal point. The analysis of the Microsoft case offered a unique opportunity to examine the matter. The anticompetitive conduct the firm was charged of in both the jurisdictions was virtually the same: exclusive dealing and tying in furtherance of its dominant position. The fact that in the US the counts addressed both Sherman Act §§ 1 and 2, while in the EC the charges took the form of a *blanket count* of an Art. 82 viola-

tion, is due to procedural reasons only.

The Microsoft litigations gave an array of information on the modes of antitrust regulation and its character, while they made clear that despite all the differences antitrust and competition law are more akin that they seem to be. Nevertheless, why US law is more descriptive, it confers motion rights to both public and private parties and is enforced mostly in courtrooms? Why on the other hand, EC law is more normative, more in the sphere of public law and mostly enforced mostly by disinterested competent agencies?

Finally, while everyone preaches in favour of intervention-free markets that self-regulate, what accounts for compulsory dealing, licensing or even disclosure of information? How do the simplifying assumptions of economics comply with the sometimes-irremediable remedies that are proposed? Is the company break-up or the de facto withdrawal of a conferred IPR compatible with economic efficiency and consumer welfare? And if they are not, who is to blame?

Chapter 2: The law

Section I Features of the Law

Before we avail ourselves of the answers to the above-mentioned questions, we should wander for a while in the realm of the US and EC antitrust legislation. Some interesting things to know are its historic legal, judicial and theoretic development, its mode of enforcement and the limitations it faces. Despite the extensive and detailed case-law that provides us with dicta and *res judicata* for the questions presented in the Microsoft litigations, an insight to the fundamental legal provisions that regulate free enterprise in the US and the single European market is the key to the mindsets of the law-makers, who promulgated the laws, and of the regulators, who have been working on them ever since.

A. HISTORIC TRACES

When the Sherman Act was initially enacted in 1890, the notion of competition law was inextricably paired with that of rivalry. Goetz (2006), 137. Maxims like "big is bad" and "the more the better" describe shortly but adequately the mens rea behind it. Until the 1940s the Supreme Court rulings on competition cases were reviewed, or more adequately, adjudicated with the per se rule; any competition restraining activity enumerated in the Sherman Act had by definition no redeeming economic value whatsoever and had to be struck down. In the meanwhile though, economists had started to accept that in some cases cartels or monopolies could be beneficial. Economic theory runs through the body of competition law, so any change to the former takes its toll on the way the law against trusts is perceived of. And of course this is fair to say for the Act was never repealed or modernised or modified – this is not the way statutes work in common-law countries. Bermann (2002), 832. The shift in economic thinking influenced instead the way the Act was enforced by the courts and mainly by the utmost producer of controlling legal authorities in the United States, the Supreme Court.

Several safe-harbours were invoked from time and again by respondents, such as the "ruinous competition" and the self-help-in-contract defence or the arguments in favour of the market stability and the protection of intellectual property rights; the courts weren't always indifferent towards these arguments. They developed the rule-of-reason review in order to allow for an assessment of that argumentation and to give a chance to practices that might well render economic efficiency more robust. In the same time, courts emancipated themselves from the "nirvana fallacy"* – Chicago Board of Trade. Consequently, the injunction of trusts and monopolies aligned itself with the modern economic thinking; the economic efficiency from an equivalent to rivalry, evolved to a highly praised desideratum –as it should have been the case from the very start– and antitrust law became the life-partner of consumer welfare.

In spite of the several meanings attributable to it, the phrase "consumer welfare" within the

competition law bibliography has come to mainly equal "lower prices and higher output". Although cases reasoned on "big is bad" or "the more the better" basis appear every now and then, the actual quest of the judges became a continuous weighing of the anticompetitive and the procompetitive effects of the conduct in question. Fifty years after the Congress passed the Sherman Act, the rule-of-reason review was there as a brand new tool in the hands of the regulators.

This evolution had its fair share of impact on antitrust litigation and enforcement; the quick and uncostly per se rule competed evenly with the sometimes more adequate but far more time and money-consuming rule-of-reason review. Thus, not only antitrust litigation did become more prone to Type I and II errors** but expensive and complex too; It evolved from a simple and foreseeable adjudication to an art of pigeonholing, where judges and justices had to put each alleged restrain into the conceptually right category. Is it contractual or unilateral? Is it horizontal or vertical? Is it price or non-price? Should it be condemned under the per se rule or reviewed under the rule-of-reason?

The 1972 Supreme Court in the TopCo ruling gave a solution to this ever-increasing court burden. With two abstinences, one concurrence and a dissent the five Justices came up with a new test in antitrust enforcement, which promised to alter the dichotomous "Per se or rule-ofreason?" question to an enforcement continuum of a "quick-look". Hence, the antitrust regulators could keep the virtues and do away with the vices: a quick consideration of the allegedly restraining actions would reveal whether they were indeed "pernicious to competition and [...] of no redeeming value" saving a lot of money and time to litigants. The burden of proof shifted from the defendant to the plaintiff allowing for some space to any "legally cognisable" and "plausible" procompetitive excuses provided by the former. Nevertheless, any "inherently suspect" action would still be promptly condemned.

This need for expedited, uncostly and effective antitrust litigation resulted in the extension of the quick-look/inherently suspect methodology over the whole body of antitrust law; nowadays it is the preeminent tool of regulation. The developments and the tensions, which have

^{*} As Goetz and McChesney put it, "[j]ust because something undesirable (e.g. price-fixing) is going on does not mean that passing a law against it will obviate the problem. Law enforcers have to be able to distinguish the problematic form the non-problematic behavior. Having no law may engender Type II (false negative) errors: bad behavior goes unpunished. But having a law may well create Type I (false positive) errors. In the end, the issue is an empirical one: does the law find and punish the anticompetitive behavior, while leaving the unobjectionable behavior alone?" Goetz (2006),

^{**} Statisticians and scientists refer to two sorts of mistakes as Type I error and Type II error. Type I is a "false positive", analogous to punishing mistakenly the innocent. Type II is a "false negative" analogous to failing mistakenly to punish the guilty. Goetz (2006), 67.

occurred within the Sherman Act § 1 litigation and its case-law by-products have foreclosed to a great degree the tensions, the outcomes and the character of the § 2 litigation, where the Microsoft cases lie.

History in Europe was significantly diverse. The sources of EC competition law lie in no act passed by any parliament; they are traced back to the 1951 Treaty establishing the European Coal and Steel Community. Article 67, which referred to competition were drafted by several antitrust experts of the time, including a professor from the Harvard Law School, Robert Bowie, a fact that explains why despite the differences US antitrust and EC competition laws are conceptually akin. Elhauge (2007), 39. The articles struck down both contractual and unilateral conduct and set up a system of merger control. Bermann (2002), 832. The expansion of economic cooperation of the ECSC Member States beyond coal and steel led to the duplication of the 1951 endeavour in the 1957 Treaty Establishing the European Economic Community. The significance the first treaty afforded to unfettered competition was left virtually intact; a series of provisions that ended up spanning from Art. 81 to Art. 88 regulate the function of the single European market.

It was obvious that the prohibition the general provisions contained in the TEEC was poorly compatible with the predominant economic thought of the time; mere banning of any possible restricting agreements between undertakings and of any alleged abuses of dominant position would deter healthy entrepreneurship and criminalise business activities, let alone business acumen.

The end of the fifty-year period, which put the tombstone to the undisputed dominance of the per se rule in the US courts' rulings coincided with the birth of the EEC and the ascension of the Chicago School to the throne of antitrust and economic thought. As Robert H. Bork reads, "[t]he primary characteristics of the Chicago School [are] the insistence that the exclusive goal of antitrust adjudication [...] is the maximization of consumer welfare [and that it] applied economic analysis more rigorously than was common at the time to test the propositions of the law and to understand the impact of business behavior on consumer welfare". Bork (1993), xi. This quest for the maximisation of consumer welfare is what defied the rightfulness of the per se legality in the antitrust scholarship and probably directed the drafters of the TEEC to opt for a more specific, more flexible and more economically wise law. Block exemption regulations were adopted: transfer of technology agreements, distribution agreements, research and development agreements as well as agreements in the motor vehicle or the insurance sectors are exempt from the Art. 81 prohibition. This secondary law is the statutory equivalent of what the US courts have judicially designated to be the rule-of-reason.

Competition law however borrows some its features from common-law legal tradition, probably due to the involvement of US scholars in the early stages of its formation. Therefore, a

great input to the formation of the EC competition law is attributable to the ECJ and the CFI case-law; it goes without saying that cases like Keck or Cassis de Dijon have driven the single market leaps forward, while cases like TetraPak laid the foundation for the legal review we shall go through in the EC Microsoft litigation.

B. ANTITRUST/COMPETITION I AW ENFORCEMENT

The most important difference between the two jurisdictions is the mode of enforcement. Although both systems are complex in their proper terms, they can be easily told apart from their remedial structure.

The US system is primarily judicial. This means, the majority of the persons allegedly harmed by anticompetitive conducts should revert to courts when they search for a relief; alternatively they can seek protection in front of the Federal Trade Commission. Remedies in the complex and multi-leveled US legal system can be sought through four channels. First Sherman Act empowers the DoJ, Antitrust Division to exclusively start criminal investigations. Second the same agency along with the FTC empowered not only by the Sherman Act but by the FTC Act as well can start civil investigations and exercise controlling authority over mergers and acquisitions; those two lie on the federal level. Third this two-fold system is duplicated in the state level, where state agencies enforce state antitrust law -heavily drafted after Sherman Act- or act on behalf of their citizens as parentes patriae. Finally there is the channel of the private -individual or class- actions, where natural or legal persons harmed by anticompetitive practices can file suits for business torts and seek injunctive relief or treble damages. The private action remedy lies between the federal and the state remedial systems and is of no equivalent to the EC legal system.

Either filed by private parties or investigated by the competent agencies the suits will eventually reach a courtroom. Both claimant and respondent will appear in front of a US District Court, will possibly appeal to a Circuit Court and if they are lucky and wealthy enough they will have their case adjudicated by the Supreme Court. The exact equivalent state procedure will take place for an alleged violation of state antitrust law. Things will be slightly different if the FTC files the original complaint. The Commission's staff will refer the facts to an Administrative Law Judge, who will then refer the case to the five-member FTC panel; the dissenting party might then move the case to a Circuit Court as well – usually the US Court of Appeals for the DC Circuit in Washington, DC.

In the EC things might seem easier but they are definitely not. The EC has exclusive competence over the conduct that runs against Art. 81 and 82 but only if these "practices [...] affect trade between Member States and [...] have as their object or effect the prevention, restriction or

distortion of competition within the [single] market". EC Treaty Art. Contrary to the US case, the procedure is administrative to a great extent. Natural or legal persons, who can show a legitimate interest and lodge a complaint before the European Commission, can set it off - Council Regulation 1/2003, art. 7. The extensive cooperation between the National Competition Authorities and the Commission may trigger the proceedings by moving a case from the national level to the EC level. The Commission has also the privilege to move on its own initiative. The DG Competition gets alarmed when "the trend of trade between Member States, the rigidity of prices or other circumstances suggest that competition may be restricted or distorted within the [single] market". Id., art. 17.

Besides that, proceedings can be initiated in front of national courts or NCAs in their capacity to enforce national competition law and to monitor the general enforcement of TEC Art. 81 and 82. Under what circumstances can EC competition law be invoked in front of a national court? In one case, defendants can invoke the basic TEC provisions in order to protect themselves from the enforcement of a restricting agreement; this is the euro-defence. In other case, claimants can seek remedy by arguing that defendants forced them to enter into a restrictive agreement; this is the euro-offence. Elhauge (2007), 50.

Since every competition law regulator within the EC has final adjudicative and remedial power over the case before it, the disputes do not get judicially reviewed always. When defendants seek to appeal a Commission's decision or a fine they revert to the CFI pursuant to TEC Art. 230; the CFI's decision can be appealed in front of the ECJ. National courts' holdings and NCAs' decisions can be appealed through the established national judicial routes.

C. LIMITATIONS TO ANTITRUST/COMPETITION LAW.

Antitrust laws in general, and the Sherman Act in particular, are the Magna Carta of freeenterprise. They are as important to the preservation of economic freedom and our freeenterprise system as the Bill of Rights is to the protection of our fundamental personal freedom. And the freedom guaranteed each and every business, no matter how small, is the freedom to compete – to assert with vigor, imagination, devotion, and ingenuity whatever economic muscle it can muster. Goetz (2006), 115.

Trade or commerce under those circumstances may nevertheless be badly and unfortunately restrained by driving out of business the small dealers and worthy men whose lives have been spent therein, and who might be unable to readjust themselves to their altered surroundings. Mere reduction in the price of the commodity dealt in might be

dearly paid for the ruin of such a class and the absorption of control over one commodity by an all-powerful combination of capital. *Id.*, 109.

In both jurisdictions the norms that provide for unfettered competition are of a great importance. Although the ECJ avoided to characterise the EC competition law like the Supreme Court did with the Sherman Act, it's clear that Art. 81 and 82 cut through the EC legal order and influence to a great extent its policies, its politics and its function. This predominance however is not absolute; both jurisdictions equally restrict the free enterprise *desideratum* from taking over every social nook and cranny.

In the US, the *ratione materiae* and *personae* scope of the Sherman Act is restricted in two ways: statutorily and judicially. The major restriction prohibits the Act from applying to activities that do not qualify as "commerce" or "trade" – characterised otherwise as non-commercial activities. Nevertheless, sheer nomenclature does not foreclose effective judicial control; in many instances appellate courts have ruled on questions regarding *prima facie* non-commercial activities – *Brown University; DELTA. Id.*, 201-17. The application of Sherman Act is further precluded by other Acts of Congress when the latter sets up specific regulatory frameworks; the Clayton and the Norris-LaGuardia Acts allow for the creation and function or labour unions, which would otherwise be regarded as contracts, combinations or conspiracies that facilitate "concerted action to raise prices [of labour]"; the Clayton and the Capper-Volstead Acts provide for the exemption of non-profit agricultural organisations, while the McCarran-Ferguson Act regulates directly the "business of insurance". A more interesting exemption has also been developed almost exclusively per the Supreme Court's case-law; professional sports. Unfettered competition within the NFL would be devastating, as it would become impossible to form a team; limitations in player contracting and new player drafting would be illegal.

On the other side of the Atlantic, TEC Art. 81 and 82 prohibit "as incompatible with the [single] market all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the [single] market". The prohibition contains two self-limitations; first, anticompetitive conduct that produces no crossborder injury falls under national competition legislation. At the same time although EC competition law is indifferent to whether a restrictive conduct lies within the borders of a sole Member State, if the trade flows with other Member States are affected this conduct can still be enjoined under EC law. Second, the anticompetitive conduct need concern "trade", that is the offering of goods and the provision of services on a given market. Per Eurocontrol, any public entity that confines itself to the exercise of non-economic activity, such as the control and supervision of air-space, does not fall within the scope of EC competition law. Additionally, per TEC Art. 36, 70-80 and 296 competition rules are foreclosed from applying to the agricultural sector, the Common Agricultural Policy, the Common Fisheries Policy, transport and

the national defence industries.

Section II Vertical Restraints and Monopolisation

Sherman Act § 1 and TEC Art. 81 are designed to strike down coordination among firms to foreclose competition, reap supracompetitive gains and harm consumers. They protect markets with several producers and consumers, all of whom have more or less the same size and none of whom can tamper with the function of the supply and demand mechanism. Not all markets though follow this pattern; some of them are controlled by a dominant firm in possession of a significant market share, far bigger than those of its rivals, who form the competitive fringe. Although, in this case there may be no collusion, the dominant firm –or monopolist in the US antitrust jargon– still has to survive antitrust muster. The practices it engages in might equally restrain competition, if it abuses its power in order to force suppliers or buyers to accept exclusive terms or to drive its direct rivals from the market. Sherman Act § 2 and TEC Art. 82 declare this type of unilateral conduct illegal in general terms.

We say in general terms for as we will see there is no clear distinction, either statutory or judicial, between the provisions a complainant might base its motion upon. Within the context of the Microsoft litigations, the US antitrust enforcing bodies accused the firm of anticompetitive monopolisation, attempted monopolization and tying. In the EC on the contrary, the European Commission issued a count accusing the firm of illegal bundling (tying) and refusal to license with the view to expand its dominant position in the software industry. Although prima facie Microsoft was deemed to have violated Sherman Act § 1 and TEC Art. 81, the fact that it held dominant position in the market, led the antitrust enforcers to attack it mostly through § 2 and Art. 82. That happened because vertical collusion, which restricts dealing with rivals, such as the practices of exclusive dealing and tie-in sales can be challenged under multiple legal rules. When these agreements are employed by a dominant firm, apart from restraining competition in and of themselves, they overtly act in furtherance or in maintenance of the dominance as well.

In the US, this kind of restrictions can be attacked either by a rival per Sherman Act § 2 and per Clayton Act § 3 or by the Federal Trade Commission per FTC Act § 5. Likewise, in the EC vertical exclusionary restrictions can be examined under both Art. 81 and 82 of the Treaty Establishing the European Community. Nevertheless, practice has it that motions are generally brought under the abuse of dominant position provision of Art. 82, without prejudice of course to the application of Art. 81. Elhauge (2007), 254.

A. UNDER US ANTITRUST LAW

Under Sherman Act § 1, "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed quilty of a felony [...]". For the purposes of this present paper, we shall focus on the ban of vertical restraints; that is downstream or upstream agreements between a defendant and its buyers or sellers respectively, which restricts the latter's ability to deal with other firms, to price independently or to enter freely a new product or geographic market. According to what it is provided in those agreements they qualify as price or non-price.

Early enough US case-law on non-price vertical restraints accepted the argument that this kind of collusion might well not contain the forces of competition. Au contraire, it can drive distributors -in the case of downstream restrictions- to invest in product promotion, prove itself effective in the producer's struggle against the free-riders and generally facilitate intrabrand competition. After all, antitrust is primarily concerned about the suppression of interbrand competition, which is declared unlawful per se. In GTE Sylvania, -involving a number of like vertical restraints- the Supreme Court held that "departure from the rule of reason must be based upon demonstrable economic effect rather than formalistic drawing". GTE Sylvania, 59.

This moment of sobriety of the nine Justices gave birth to a norm that survives until today: US antitrust law affords to non-price vertical restraints the rule of reason review that focuses first on the actual existence of an agreement, second on the market share of the defendant and third on the competitive scale – do the anticompetitive effects of the conduct in question outweigh the procompetitive ones?

No matter how much vigorous this ban sound to us now, the US bureaucracy of the early 20th century did not seem to share the same belief. Sherman Act § 1 soon lost the impetus surrounding its enactment and ceased being regarded as effective as it actually was. The promulgation of the rule-of-reason review added to that resentment too; when Standard Oil delivered this brand new tool in antitrust enforcement, it fueled an already ongoing debate over the need for stricter antitrust legislation. The debate took its toll on the following year's presidential election as well. When Woodrow Wilson got elected in office he proposed two pieces of legislation, which were later to be known as the Clayton Act and the FTC Act. The first identified additional practices as able to "[...] to substantially lessen competition or tend to create a monopoly in any line of commerce" and enjoined them, whereas the second created a disinterested public agency, the Federal Trade Commission, and endowed with it public antitrust enforcement. The legislative excitement did not halt; in 1936 Congress amended Clayton Act § 2 into what ended up being a ban on price discrimination or otherwise the Robinson-Patman

Act. All in all, these pieces of legislation passed and enforced within fifty years after the original adoption of Sherman Act, built on the foundations laid by the latter with the view to further buttress the protection unfettered competition.

Exclusive dealing and tie-in sales can be struck down per Clayton Act § 3 as well. The section reads:

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

Firms that do engage in either conduct and restrain competition by these means are violating US antitrust law. It goes without saying that not every single tie-in sale is illegal; first the products engaged have to be distinct, second the sale of the one (tied good) has to be conditioned upon the sale of the other (tying good) and finally the firm engaging therein has to have market power. The controlling authority on that matter is the Supreme Court *Jefferson Parish* decision held in 1984: tying is economically harmful, where power in the tying market is used to create additional market power for the tied market. A tying arrangement will not pass antitrust muster when the firm holds power in the tying market, it runs a high possibility of acquiring market power in the tied market and the two products involved are distinct in terms of economic coherence; "For products to be treated as distinct, the tied product must at a minimum be one that some consumers might wish to purchase separately without also purchasing the tying product". Jefferson Parish, 39.

Firms engaging in exclusive dealing or tying have one additional legal hurdle to overcome: the FTC and the FTC Act § 5, which declares as incompatible with antitrust law "[u]nfair methods of competition in or affecting commerce [...]". The statute empowers the FTC to go after situations that lag behind monopoly but can be equally harmful to free enterprise: the target is set on conduct that facilitates oligopolistic coordination and can be described as "conscious parallelism", "implied collusion" or "tacit agreement". The enjoinment of such practices is still debatable as case-law has not settled on what differentiates the actual function of a product or

geographic oligopoly from cases where absent an explicit agreement the market players seem to coordinate to the detriment of competition.

Microsoft was and still is in possession of an extensive market share. Thus, US DoJ expressed additional concerns on possible violation of Sherman Act § 2. The § reads, "[e] very person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony [...]". Three offences are enumerated: monopolisation, attempted monopolisation and conspiracy to monopolise. The ostensible condemnation of every monopolistic market per se is due to the fact that when Sherman Act passed Congress in 1890, economics hadn't come up with the term-of-art "abuse of dominant position". Caselaw has indicated that monopolies do not contradict by definition § 2, especially when they have emanated from superior productivity, business acumen or a historic accident: a firm that enjoys monopoly power for reasons other than these is liable for monopolisation. How can we identify though the real conditions that gave this firm its power? After all, aren't the more efficient ones supposed to show the non-efficient ones the way out? How can we tell competition on the merits and predation -a general term describing anticompetitive and exclusionary conduct- apart? The Court of Appeals for the 7th Circuit in Rose Acre, decided that predation might be assumed from objective economic indicators.

The appellate court roughly ruled that when prices are above cost there is no predation but mere competition on the merits. Where, on the contrary, prices are below cost and the defendant seems to additionally have the intention to attack its rivals, then there is predation. Although Rose Acre didn't rule on the monopolisation count it added to its understanding; what it actually ruled on was attempted monopolisation. Firms that do have intent to monopolise, do engage in predation and run high possibilities of succeeding in their attempts, have to deal with Sherman Act § 2. This offence was entered so as to give rivals an advantage and attack by means of private action- any monopolistic conduct in its incipiency. Potentially this could result in every inefficient company filing an antitrust suit against any more rigorous competitor. For this reason, the conduct in question gets enjoined only when it is likely to come to fruition; otherwise the price drop the leader would have to sustain will benefit consumers as they will pay less for the same output. We will see later that modern antitrust literature and case-law treats attempted monopolisation and recoupment as highly unlikely to occur. Does this equal to per se legality of every kind of oligopolistic predation? The answer is no, for in case the result of the predation is still an oligopoly, the consumers will be deemed to be worse off and thus injured. See, Liggett.

The third conduct reviewed under § 2 is conspiracy to monopolise, an offence which cuts through both §§ 1 and 2 of the Sherman Act. Except for predation intent and possible recoupment, it also features a conspiracy and an overt action in furtherance thereof.

Whatever statute is specifically invoked, the economics behind the conduct in question is still the same and each statute effectively imposes the same requirement; that the defendant rebut the allegation of the plaintiff that it injures competition on its face. The limitations peculiar to the statutes play no particular role given the overlap among them. For instance, the fact that Clayton Act § 3 is limited to goods means that it does not govern agreements that involve sales or discounts on services, while its limitation to sales or leases designates that it does not cover upstream exclusive dealing that eschews inputs. But neither limitation really matters for such agreements would still qualify as actionable per Sherman Act § 1. Likewise, the fact that § 2 is limited to defendants with monopoly power and FTC Act § 5 to defendants with near monopoly power may not matter either, because Sherman Act § 1 still goes after defendants with smaller amount of power. The degree of market power or of market foreclosure may well be relevant to assessing the likelihood or size of anticompetitive effects; but this is equally true under any of the statutes.

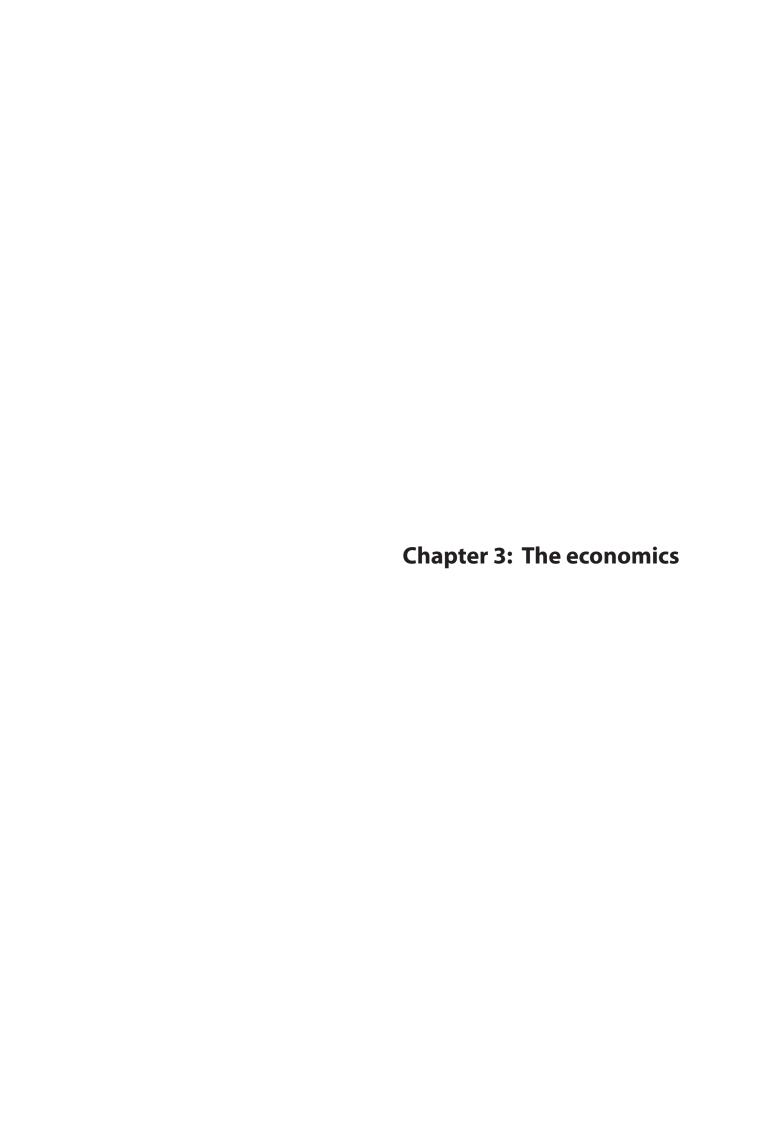
B. UNDER EC COMPETITION LAW

EC law on vertical restraints functions the same way to a great extent. Yet, the European Commission apart from ensuring unfettered competition has an additional goal to attain, which imposes an extra burden on EC competition enforcement; market integration. It thus follows that the relevant EC review of restraints may be more onerous for the defendant than its US equivalent.

The article that prohibits all kinds of collusion among both competing (horizontal) and noncompeting (vertical) undertakings in the single market is TEC Art. 81: "all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market". A general prohibition of collusion in the EC on all fours with a full-blown per se rule against collusion in the US, would oust economic efficiency, which sometimes might well be attained through it. "Experience acquired to date makes it possible to define a category of vertical agreements which can be regarded as normally satisfying the conditions [...] ". Commission Regulation 2790/1999, 21. In the US this concern subsidised with the promulgation of the rule of reason review by the Supreme Court albeit this gave rise to counter-concerns as we've already seen. The EC response, while more formalistic as it took the form of a statute of secondary law rather than that of a common-law dictum, draws the same line of reasoning and declares as falling outside of the scope of the prohibition of Art. 81 every non-hardcore vertical restraint concluded with a supplier, whose share does not exceed 30% of the relevant market. The hardcore restrictions, which are per se illegal are those containing minimum or fixed resale prices and geographic market allocations. Id,. 21. The market integration goal dictates that the benefit can be further foregone upon the Commission's initiative, when it detects similar parallel networks of vertical restrictions that do cover more than 50% of the single market. Id., 22.

Microsoft's life would have been a lot easier but for its size. Extensive market shares raise concerns about possible abuse of dominant position in the EC like they do in the US, although the former's anti-monopolistic legislation was not enacted in response to over-concentration as was the case with the latter. Bermann (2002), 833. "Antitrust policy requires that great aggregations of power be closely scrutinized". Goetz (2006), 137. So, per Art. 82 of the Treaty "[a]ny abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States". The Commission used this article in order to accuse our defendant of non-price vertical restrictions and general monopolistic behaviour at the same time.

All in all, the coinciding interest of both the jurisdictions to suppress every conduct that contains the forces of competition has shaped heavily the competent legislation. Both laws address vertical restraints alike; this kind of collusion between non-competing firms tends to promote intrabrand over interbrand competition, a price that antitrust enforcers are willing to take. When though one of the engaged firms is in possession of considerable market power then the review focuses more on a possible abuse of dominant position rather than the restraining effect of the vertical agreements as such. Market power is deemed to multiply the pernicious effects coordination has on competition in a more concentrated market. But, what market do we speak of? What constitutes power therein and how can it be abused? The questions are addressed in the following chapter.



It is generally assumed that a system of free-enterprise with competition law allocates resources efficiently and maximises the welfare of the consumers. This maximisation usually takes the form of the absolute "lower prices and higher output". Competition law is thus enacted to help a society achieve its welfare goals in a more direct and cost-effective manner. Where is this belief based upon? What dictates free-enterprise be the closest to an optimal allocator of the available resources? The answer is economics and some of its basic principles that lie behind antitrust.

Section I The dominant position

The Microsoft litigations boiled down to the injunction of an abuse of dominant position. Both regulators had to answer, how much water did Microsoft's hands hold, what was its market power. Although size does not suffice to infer anticompetitive conduct, the very conduct the dominant firm engages in may be regarded anticompetitive due to its size. This reasoning, indeed, seems highly contestable: after all, whether the conduct in question has some or has not any anticompetitive effect, why should the degree of market power be of a concern in the first place?

The effects of a certain business conduct on competition and consumer welfare can hardly be appraised accurately: this endeavour would cost the regulators a lot of resources and would expose them to critical –both Type I and II– errors. As a matter of fact, it would require them to count on a case-by-case basis either the consumers, who refrained from buying because of the output restriction and the subsequent price increase or, even more demanding, those, who made decisions they would otherwise not make and are thus dissatisfied in general terms. That kind of continuous, extensive and thorough review results into two things: on the one hand, business with lawful strategies hesitate and start having second thoughts for they may draw the attention of antitrust authorities; on the other hand, the authorities themselves will have to bear a huge administrative burden of reviewing on the merits every single case brought to them. It is clear that neither legal uncertainty nor a full-blown and costly rule-of-reason review do foster free-enterprise.

Without elaborating any deeper in the field of humanities, we affirm that since social and political scientists do not have the luxury of trial and error, they afford themselves their personal observation. Antitrust regulators developed the practice of a screening test, which on its face signal them whether they have to challenge a case or not. For the purposes of monopolisation review, this screening test requires the calculation of the market power of the alleged abuser: the bigger the market power the higher the likelihood the conduct a dominant firm pursues, has injurious effects on consumer welfare.

A. MARKET DEFINITION

In both jurisdictions, the regulators have issued guidelines that give us information on how they perceive of relevant product markets. See, Merger Guidelines; Commission Notice (1997) 5-13. A quick browsing through will shed ample light on this matter.

A market is defined as a product or group of products and a geographic area in which it is produced or sold such that a hypothetical profit-miximizing firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose at least a "small but significant and nontransitory" increase in price, assuming the terms of sale of all other products are held constant. A relevant market is a group of products and a geographic area that is no bigger than necessary to satisfy this test.

Merger Guidelines, 1.0. The controlling doctrine from the Supreme Court lies in duPont, and was reaffirmed by Grinnell: "[c]ommodities reasonably interchangeable make up that 'part' of trade or commerce, which § 2 protects against monopoly power". Goetz (2006), 339. Eastman Kodak is one of the most important recent cases of the Supreme Court as well, but it barely applies any of the assumptions of the Chicagoan economics in its reasoning and give us a different perspective of what the Justices think a market might also be. The main question in this milestone tying case was whether the lack of power in the primary market precluded the existence of power in the aftermarket. The majority held that sufficient consumer demand can be an index of distinct products, in the sense that a single product can still define a relevant market if high switching costs prevent it from being interchangeable with competing products. Goetz (2006), 622. This reasoning, notwithstanding the fact that it might create inferences of protection of competitors over protection of competition, is still consistent with previous case-law, such as the NCAA decision, 468 US 84. "[The] relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use." Commission Notice, ¶ II. 8. The EC equivalent of Grinnell is the motion of Europemballage Corporation against the Commission, or as it is more known the Continental Can case. The ECJ defined the relevant market by complying fully to the test defined by the Commission, as cited above and got on all fours with the Supreme Court. The ECJ went on to affirm that demand substitutability is the force that shapes business choices. It follows that for the Commission and the ECJ, which upheld the former's allegations in this case, the exercise of the market definition test consists of identifying the alternatives consumers have in a relevant product market.

One of the bananas case in front of the ECJ, delivered the European Eastman Kodak. United Brands echoed the US Supreme Court and ruled that a product is able of constituting a market in and of itself. It additionally required that it should be possible for it to be singled out from

other products by such special distinguishing features that its interchangeability is limited and competition hardly perceptible.

Both US and EC case-law indicate that regulators should use the substitutability criterion, in order to decide what product to include in the relevant market and what to exclude therefrom. Demand substitution assumes that prices are at the competitive level and allow for the free shift of consumers from one product to the other. Since though there is a dominant firm and an alleged abuse is alleged, actual prices will deviate from the competitive ones. Data on the competitive price levels are not available; this way the regulators assume away the very question investigated. How do they break out of this circularity? In the US, the DoJ or the FTC ask whether the reduction in sales of a product following the monopolistic conduct is large enough that a projected monopolist will find it unprofitable to raise prices. Merger Guidelines, 1.12. In the EC, the European Commission examines whether the substitution rate will be high enough to outweigh the gains from the price increase. DG Competition (Dec. 2005) 3.

The above analysis provides the basis for our discussion on the market definition in the Microsoft litigations. We insisted on the relevant product market definition, since it is understood that the geographic market for software products is a globalised one. The penetration of the internet, both current and projected, expunges every issue of geographical restrictions: software consumers from all over the world can buy directly from the suppliers.

B. MARKET POWER

The degree of the market power of the respondent in an antitrust claim signals the regulators if they should proceed to try or dismiss the case. Alluding to the problem of the verification of the pernicious impact of a monopolist's conduct on competition, we affirm that the same problem exists in measuring the monopolist's power as well. Now that we have defined the relevant market, how are we going to calculate respondent's power in it? Seems that the easiest way to do so is to measure its market share – a simple algebraic task. "Market share is a proxy for market power, which is the decisive factor". Id., 4.2.1. But, how does the function work?

The independent variant of our function –market share– precludes in the eyes of the regulator the dependent variable – the market power. As afore-mentioned, the bigger the market power the more the likelihood of injured competition. High market shares are deemed to confer to their holder different kinds of control over the relevant market; namely power to raise prices above the marginal cost, power to price above competitive levels and power to constrain total market output in order to raise market prices and profits. Still, that wouldn't make much of a sense to the eyes of an economist. He or she would instead argue that we would have to measure the firm's and the market's demand elasticities: the higher the market demand elasticity,

the higher the leader-specific demand elasticity and thus the lower its market power. In brief, the more steep the demand curve of a firm the higher its market power should ceteris paribus be. Elhauge (2007) 309-13.

Unlike the European Commission, which recently issued a discussion paper on the application of Art. 82 of the Treaty, the US DoJ or the FTC haven't proceeded in anything of the same value. Courts' case-law still dictates what constitutes monopoly in the US. Eastman Kodak defines a firm with monopoly power as one, which has market power -i.e. a large market sharethat allows it "to control prices or exclude competition". Eastman Kodak, 481. Given the absence of linguistic distinction between dominance and abuse thereof in US law -due to the early adoption of the Sherman Act, long before the development of modern economic jargon in the '50s-, it seems that the Supreme Court would strike down as anticompetitive every conduct of a firm with a large market share. It is as if saying that the control a leader has on its prices is necessary and sufficient index for a plaintiff to show the former's anticompetitive conduct. But this would lead antitrust regulators to depart from the protection of competition and diminish them to business-to-business disputes adjudicators.

More case-law down the road, sheds more light on the method US courts employ in order to verify dominance; they infer market power from the respective shares, when the latter are coupled with evidence of existence of high barriers to entry. Elhauge (2007), 266.

[This] power [would be deemed to be] the result of barriers erected by its own business methods (even though not predatory, immoral, or restraining trade in violation of § 1 of the Sherman Act), unless the enterprise shows that the barriers are exclusively the result of superior skill, superior products, natural advantages, technological or economic efficiency, scientific research, low margins of profit maintained permanently and without discrimination, legal licenses, or the like.

United Shoe, 295. But how much of market power is enough? What percentage of the total market output could generate the inference of excessive market power? AICoA, despite being a 2nd Circuit decision and thus controlling solely in that jurisdiction, can provide a simple rule of thumb as an answer to this threshold question. Namely, shares above 90% will suffice to construe market power; shares around 60 to 64%, it is doubtful whether they would while shares below 33% clearly cannot. AlCoA, 424. The high-end arm of this test was duplicated in other jurisdictions too – *United Shoe*.

The European Commission followed the same pattern with its US counterparts. Its discussion paper defines dominance as: "[...] a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers, and ultimately the consumers". DG Competition (Dec. 2005), 9. The concurrence between the Commission and the ECJ is more than obvious as this definition is duplicated by Hoffman-LaRoche. As a matter of law, this definition contains two elements: the ability to prevent competition and the ability to behave independently. They respectively stand for the ability to exclude competitors and the ability to control prices of Eastman Kodak.

The two cases not only share the same concepts but the same circularity as well. The answer is given again by the competent EC case-law, although it is equally blur as the US case-law. In 1979 the ECJ ruled that dominance may be inferred from a large market share, when the next largest firm is half the size of the first or less: Hoffman-LaRoche's share ranged in the vitamin market between 75% and 87%. In 1991 the same court delivered the AKZO decision. Quoting the previous case it held that "very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position" and that the respondent having a market share of 50% satisfied the criterion. AKZO, ¶ 60. The same data suggest that market shares above 50% and surely above 75% suffice to construe dominance, while shares below 25% seem too feeble to raise antitrust concerns. DG Competition (Dec. 2005), 11. We are thus left with a tranche of 25% to 50%; in this case the regulator has to assess additional factors that might be indicative of dominance, such as barriers to entry.

When identifying possible barriers to expansion and entry it is important to focus on whether rivals can reasonably replicate circumstances that give advantages to the allegedly dominant undertaking. Barriers to expansion and entry can have a number of origins relating to the legal or economic environment that pertains on the relevant market:

- Legal barriers: the legislative framework covering the relevant market can be an important barrier. Such legislation may limit the number of market participants, for example by granting special or exclusive rights in the shape of concessions, licenses or intellectual property rights....
- Capacity constraints: competitors may have to commit large sunk investments in order to expand capacity. An investment or cost is sunk when it cannot be recovered if the undertaking exits the market. Moreover, even when exiting excess capacity may be so expensive to employ that these costs constitute a barrier to expansion; for instance, the costs of introducing another shift in a factory may constitute a barrier to expansion.
- Economies of scale and scope: large-scale production or distribution may give the allegedly dominant undertaking an advantage over smaller competitors. Scale and scope economies result from the spreading of fixed costs over larger output or a broader set of products, leading to reduction of average costs. When economies of

scale or scope are important and require a substantial production capacity compared to the size of the market, efficient expansion or entry is more costly and risky....

- Absolute cost advantages: these include preferential access to essential facilities, natural resources, innovation and R&D, intellectual property rights and capital conferring a competitive advantage on the allegedly dominant undertaking, which makes is difficult for the other undertakings to compete effectively....
- Privileged access to supply: the allegedly dominant undertaking may be vertically integrated or may have established sufficient control or influence over the supply of inputs that expansion or entry by smaller rival firms may be difficult or costly.
- A highly developed distribution and sales network: the allegedly dominant undertaking may have its own dense outlet network, established distribution logistics or wide geographical coverage that would be difficult for rivals to replicate.
- The established position of the incumbent firms on the market: it may be difficult to enter an industry where experience or reputation is necessary to compete effectively, both of which may be difficult to obtain as an entrant. Factors such as consumer loyalty to a particular brand, the closeness of relationships between suppliers and customers, the importance of promotion or advertising, or other reputation advantages will be taken into account. Advertising and other investments in reputation are often sunk costs which cannot be recovered in the case of exit and which therefore make entry more risky.
- Other strategic barriers to expansion or entry: these encompass situations where it is costly for customers to switch to a new supplier. This may for example be the case where personnel have been trained to use the product of the allegedly dominant undertaking or where due to network effects the value of rivals' products are lower because they do not have a large installed base of customers... Id., 13-15.

The question of whether a relevant product market is protected against entry is critical, because the inference of market power may depend on it if the respondent is an enterprise with a modest market share. Although antitrust law is designed to rectify situations that depart from perfect competition, it is largely based on the premise that markets self-regulate. Hence, unless due to superior productivity, business acumen or a historic accident, barriers to entry are artificially imposed by the market leader thanks to its power over the market and have to be struck down for they do nothing but sustain the oligolistic structure of the market. From what it is generally perceived as "barriers to entry", those that are of a concern to our analysis are capital requirements, vertical integration, promotion and product differentiation.

Antitrust literature distinguishes capital requirements into those imposed on potential entrants by the incumbent and those that pertain to the market structure itself. Capital requirements do not necessarily mean a certain pecuniary threshold to be met upon incorporation. They should be instead construed as comprising market peculiarities, which have the impact of raising the cost of entry. Robert Bork argues, most unexpectedly, that irrespective of the distinction, capital requirements do not bar entry; on the contrary, they maximise efficiency; they exist and certainly inhibit entry just as talent requirements for playing professional football" exist and inhibit entry". Bork (1993), 320.

An incumbent can never impose excessive capital requirements on entrants without acting economically unsound itself; it would have to expand, either by horizontal or vertical integration. If it decides to integrate horizontally through mergers, buyouts or mere expansion, the incumbent enterprise runs the risk of growing beyond optimal levels and put its own efficiency into jeopardy. If it possesses a considerable share of the market under its control and it is able at the same time to sustain efficiency losses in the long run -so as to deter possible rivals from entering and to continue reaping its supracompetitive gains- then this enterprise has market power. If on the contrary it still possesses the same market share but it is unable to cope with overexpansion, then the deterioration in its efficiency terms will open the market to other, more efficient enterprises. The overall market efficiency will be enhanced and the consumers' welfare elevated.

The same reasoning applies also when our enterprise decides to integrate vertically and buy out, say, all existing channels of distribution; if this is a more efficient way of doing business we may reprimand the enterprise for delaying in doing so and not for allegedly raising artificial barriers to potential rivals. Any entrant would then have to come in at both levels not because of the barrier "raised" but because it will have to be -at least- as efficient as the incumbent. How feasible is for a leader to integrate vertically with an exclusive view to deter entry? Supposing that the leader wouldn't do so for any other reason –since we are dealing with intentional blockage- it would be unwise to support an inference of market power. The deterioration of its efficiency will undermine this business choice far faster "than a typist in the Antitrust Division could rap out a form complaint". Id., 311. As long as there would be supracompetitive gains yet to be reaped, entrants would rush into the market in all levels.

In the case that elevated requirements is a peculiarity of the market there is not much to say; the scale of operation requires abundant and cheap financial resources. In that sense the upfront possession of capital is an important efficiency and not a barrier. As productive input, capital is subject to the law of diminishing returns; the more of it an enterprise has the less it will have to spend in order to provide information to creditors. Hence, the possession of capital by an incumbent gives it no additional advantage over an entrant than the one it may already have through competent management, market knowledge or established commercial

contacts.

Dealerships are another form of vertical integration that competition law still regards as barring entry – *United Shoe, TetraPak*. Holders of larger market shares attract more and better dealers and collude with them. These dealers, thanks to their own or their supplier's financial strength, are capable of marketing the products in terms deemed to keep potential rivals off the market. Id., 325. But if consumer welfare is not worsened why should these dealerships be of antitrust concern? Suppliers, who sell like hot cakes, attract more and better distributors. Any opposition to that get us back to the old days when antitrust law protected the business of "worthy men whose lives have been spent therein". Goetz (2006), 109. Although there is no premise for that contention in modern economics, antitrust still classifies extensive networks of dealerships as injurious to competition Commission Regulation 2790/1999, 22. In any case, the welfare-centered modern economic thought would object to the inference of excessive market power from an extensive dealership system organised by a firm with a modest market share.

Economies in production, research, distribution, and the like will inevitably lower average costs and will tend to lower prices - thus easily qualifying as procompetitive consequences. Economies in promotional expenditures, on the other hand, present less impressive qualifications. They may not lower average costs at all, since total promotional efforts may increase; and if promotional efforts are intensified, they will raise barriers to entry whenever they increase the durability of consumer preferences for established brands. In short, promotional economies, generally speaking, are not as procompetitive as other kinds of economies.... Turner (1965), 1361.

This statement of Donald Turner in the Harvard Law Review summarises the "obsession" Robert Bork puts down to antitrust scholars with regard to promotion and advertising. There have been campaigns directly against advertising, which were financially supported by the FTC. Bork (1993), 314.

If there is any chance for a holder of a large market share to maintain the oligopolistic structure of the market by raising capital requirements or by engaging in vertical integration, there is no chance it would succeed in predation through promotion. This is for first, there is no way an incumbent firm can bar the access of anyone interested in entering the market to all the providers of promotional or advertising services. Second, the only advantage an established firm enjoys compared to a rival is that the former has already paid for what the latter still has to. In other words, if the market is oligopolistic and the market leader reaps supracompetitive profits then the entrant will be willing to pay for the promotion. Third, promotion is a means to communicate information about alternatives that erode established market positions. Finally, promotion can attract wholly new consumers and part of the result of vast promotional

spending may end up in the hands of a rival.

It follows that promotion and predation are incompatible; there is no such thing as "predatory promotion". In effect, an incumbent, holder of a share of whatever size, that engages in heavy promotional and advertising activity is undermining its own position in the market.

The last barrier to be reviewed is physical product differentiation. It is clear that differentiation exists if consumers' response to it is positive. Suppliers wouldn't bother to invest and differentiate their products if they couldn't make any profit for it. In that sense and to the extent it responds to the preferences of the consumers, physical product differentiation is a form of efficiency. Bork (1993), 312. The argument that it protects markets from entry, is premised on two beliefs: first, that a potential entrant would have to offer a uniquely differentiated product in order to break in. This undoubtedly raises the cost of entry, yet how antitrust inconsistent is consumers' preference towards the incumbent's version of a product? Not much. Second, that differentiation acts the same way output restrictions do: in short, a market comprising of several differentiated products is nothing but a group of small product-based markets, possibly with above-normal prices and high switching costs. While this may be true for markets with patentable goods, Elhauge (2007), 278, it still fails to raise antitrust concerns. What is abovenormal prices and what output is restricted, if any? The fact that differentiated products survive the homogenising forces of the market, signal the product diversity consumers like to enjoy and their choice to pay more for it. After all, the unreasonable -"above-normal"- price of today may become the reasonable price of tomorrow. Trenton Potteries, 397.

Section II The Abuse of Dominant Position

In cases where vast market shares are at stake, any discussion on barriers to entry –like the one above– would sound futile; but it is definitely not. The way antitrust law deals with potential rivalry within oligopolistic markets and the conclusions we just draw on how much water do these assumptions hold, will be helpful in our assessment of the Microsoft litigations.

For US antitrust law Microsoft was a monopolist and for EC competition law Microsoft was a dominant firm. This fact alone is not able to draw the attention of the antitrust regulators on a firm, not to mention about making them move against it. While carrying out their investigations, the agencies came across facts, which to their eyes indicated that Microsoft was abusing its dominant position. But what "abuse of dominant position" stands for? What type of conduct is antitrust law incompatible?

US case-law affords a monopolist's unilateral conduct the same rule-of-reason it affords to concerted action of firms that lack excessive market power or any likelihood of acquiring it.

Any conduct that excludes rivals is anticompetitive unless it is motivated by "valid business reasons", "normal business purpose" or "legitimate competitive reasons". Eastman Kodak, 483; Aspen Skiing, 605; 608. Someone may inversely wonder, what invalid, abnormal and illegitimate actually is? Most expectedly, anything that excludes "rivals on some basis other than efficiency". Bork (1993), 138.

The position of US law on the matter is fairly blur; yet common law tradition lacks the civil law principle of legal certainty. Unfortunately EC law, case-law and administrative practice are equally confusing and fail to draw any normatively bright line. Lang (July 2005), 40. A profile of what constitutes illicit unilateral conduct under EC competition law can be drawn by dicta dispersed in several ECJ holdings. Hoffman-LaRoche tells us that anticompetitive conduct is methods that depart from normal competition and undermine the maintenance or growth of existing competition. AKZO adds that large firms shouldn't go to great competitive lengths with smaller competitors or new entrants, while Michelin II confines the former only to competition on the merits and nothing else. Id., 41. And the question pops up again; what normal competition and competition on the merits mean?

The first could mean business practices, which are also routinely carried out by non-dominant firms in the same market, a proposition already rejected by the European Commission. The second has been defined as antagonism on the basis of price, quality and functionality, but it doesn't work either. Id. A closer look into specific US and EC case-law may give us some more solid answers.

A. EXCLUSIVE DEALING/SINGLE BRANDING

Exclusive dealing is a form of collusion that benefited a lot from the development of modern economic thought in antitrust law. Although it has never been declared wholly lawful, it can still survive the antitrust muster if the parties involved show the regulators that the performance of the contract in exclusive terms does not harm competition or consumers. The stifling force of exclusive dealing lies in its ability to deprive rivals of efficient means of distribution, to deny them scale economies, to reduce inter-brand competition by facilitating vertical collusion and to deter intra-brand competition between the distributors of a single brand.

The controlling authority on the matter is the Supreme Court decision in Tampa Electric. With this holding the Justices tore down the last reminiscent nuances of the formalistic per se rule and signaled their shift to a more realistic rule-of-reason approach of vertical dealing. The two-prong test promulgated there aims at protecting lawful business activity from the inherent suspiciousness antitrust regulators have against exclusivity clauses. The first prong requires that when reviewing a like contract the courts shall examine its qualitative substantiality rather than its quantitative substantiality. In brief, what the Supreme Court asks for is a rule-of-reason review that will estimate the size of the market foreclosure and will not infer injury just from the amount of money in question.* The effect of the actual performance of the contract should be the one under control and not its mere characterisation as an exclusive-dealing arrangement.

The second prong is a four-part rule of thumb. For an arrangement between upstream or downstream competitors to be injurious there has to be: (a) an exclusive contract; (b) related to the market affected; (c) with substantial market foreclosure; (d) and no procompetitive benefits. Goetz (2006), 635. Under the *Tampa Electric* test, market definition takes a great toll on the outcome of the antitrust investigation, something that was clearly highlighted by the significance the parties gave it during the discussion of the facts. It follows then that the inference of monopolistic behaviour depends heavily on a precise estimation of the percentage of the market that is reserved to a specific firm.*

However hostile US regulators may be towards exclusive agreements as a form of vertical integration, truth is that they have never struck them down. Bork (1993), 309. It seems that the rule-of-reason scale always leans towards the efficiencies that are created. More traditional economics focus on reduced uncertainty, elimination of free riders, firm-specific investments, synergies and suppression of other administrative costs. The novel interest though for the researcher lies in how antitrust law copes with modern theories, such as the economics of contractual relations – also known as the "hold-up problem".

(1993) 302.

^{*} In that respect the Court ruled: "It is urged that the present contract pre-empts competition to the extent of purchases worth perhaps \$128,000,000, and that this 'is, of course, not insignificant or insubstantial.' While \$128,000,000 is a considerable sum of money, even in these days, the dollar volume, by itself, is not the test, as we have already pointed out. [...] The remaining determination, therefore, is whether the pre-emption of competition to the extent of the tonnage involved tends to substantially foreclose competition in the relevant coal market. We think not. That market sees an annual trade in excess of 250,000,000 tons of coal and over a billion dollars-multiplied by 20 years it runs into astronomical figures. [...] [W]e seem to have only that type of contract which 'may well be of economic advantage to buyers as well as to sellers.' [...] In the case of the buyer it 'may assure supply,' while on the part of the seller it 'may make possible the substantial reduction of selling expenses, give protection against price fluctuations, and [...] offer the possibility of a predictable market.' [...] The 20-year period of the contract is singled out as the principal vice, but at least in the case of public utilities the assurance of a steady and ample supply of fuel is necessary in the public interest." Tampa Electric, 334.

**The Supreme Court estimated this percentage to be as high as 0.77% for a period of twenty years. Bork

	private law	public law
regulation ex ante	contract	→ contract law
regulation ex post	reputation	litigation

Contracting economics hold that the most efficient contract is not the one that thoroughly defines the desired performance but the one that provides incentives and structures contractual powers in a way that minimises the likelihood of regulatory intervention. One way the contracting parties can achieve this is by encroaching into the field of public law through –excessively– long-time contracting. Doing this they run a double risk: first, to be held up in a contract that may cease to serve their business interests before they can break out of it and second, and more undesirable, to draw the attention of antitrust regulators. How can they cut around that problem? Through exclusive dealing, modern bibliography seems to suggest. The efficient balancing of the parties' rights and duties coupled with short-term yet enhanced business certainty, generate economies, which allow for lower prices directly passed on to consumers. *Cf.* Elhauge (2007), 502.

The negative effects on the market that may result from vertical restraints which EC competition law aims at preventing are [...] (i) foreclosure of other suppliers or other buyers by raising barriers to entry, (ii) reduction of inter-brand competition between the companies operating on a market, including facilitation of collusion amongst suppliers or buyers; by collusion is meant both explicit collusion and tacit collusion (conscious parallel behaviour), (iii) reduction of intra-brand competition between distributors of the same brand [and] (iv) the creation of obstacles to market integration, including, above all, limitations on the freedom of consumers to purchase goods or services in any Member State they may choose. Commission noticE, (2000), ¶ 103.

The EC equivalent of exclusive dealing, single branding, is dealt with TEC Art. 82; these arrangements are addressed for they are methods different from those that pertain to *normal* competition and for they undermine either competition itself or its growth – *Hoffman-LaRoche*. When assessing the arrangement in question the European Commission shall try to identify its foreclosing effects, DG Competition (Dec. 2005) ¶ 144, like the Supreme Court would search how the arrangement substantiates qualitatively per *Tampa Electric*.

The Commission recognises that the dominant firm can provide efficiency excuses for the single branding practice; yet those have to fulfill certain criteria, which make sure that meeting competition cannot be used as a plausible justification. The objective justifications and the efficiencies the Commission regards admissible are cost reductions that are to the direct benefit of the consumers and offers to a distributor that can either boost resales or provide incentives for investments – firm-specific promotional investments, after-sales services etc. Id., ¶ 173-176.

Several sources of hard and soft law in both the US and the EC affirm that exclusive dealing/single branding does not necessarily stifle competition. Firms that are at different levels of production and distribution and do not have a position of strength can collude freely provided that this way they generate boons for the consumers.

B. TIE-IN SALES

In tie-in sales the US Supreme Court has seen nothing else but the suppression of competition, which is explained by the fact that it has never assessed their procompetitive function. What is has never done either is condemning them right away as unlawful per se under Sherman Act § 1 or Clayton Act § 3. So, as an unfortunate consequence, US case-law on the matter is pending between the implicit per se ban of Jefferson Parish and the explicit quick-look approach of Independent Ink; this qualified per se rule provides that competition is injured when a dominant firm makes the sale of a product -tied- conditional upon the sale of an other tying-, in the market of which the firm is dominant. Bermann (2002), 867. The question then becomes how do we infer market power in the tying market and how do we infer the "substantial threat to acquire market power" in the tied market – Jefferson Parish, 41.

Power over the tying product can be inferred from market shares as small as 30% - Jefferson Parish-, from the existence of a patent protecting the tying product -Independent Ink- or from the lack of other interchangeable products in the tying market - Eastman Kodak. A threat to get a position of strength substantiates when the tie-in sale creates asymmetries in the tied market and tampers with the function of the price mechanism. If by selling two products together their seller deprives consumers of information -usually conveyed to them through price- that would shape consumer choices otherwise, then the subsequent inequilibrium is injurious to competition.

Things in EC are not easier; there is an array of provisions referring to tying. Depending on whether the agreement in question is concluded between parties in a position of strength or not a tying arrangement is struck down per either Art. 82 or 81(1) respectively. At the same time Commission Regulation 2790/1999 provides a safe-harbour: vertical agreements with a

supplier who possesses less than 30% of the relevant market are TEC compatible. *See also*, Commission Regulation 772/2004. Thus EC law on tying requires not only the sale of one product conditioned upon the sale of an other, but also at least 30% market share in the tying market, percentage equivalent to the one provided by US law. However, EC case-law has focused on tying as an abuse of dominant position and has gone after it per Art. 82.

The most important EC case on the matter is the motion of Tetra Pak International SA against the Commission. The holding echoes the US *qualified per se* ban. European regulators focused almost exclusively on TetraPak's market shares and showed that it was a quasi-monopolist. As such, it should have refrained from tying the cartons in the packaging equipment since it narrowed down the supplying choices of its customers to itself and foreclosed competition in the carton market. TetraPak objected *arguendo* that the technological interdependence between the two markets zeroed the possibilities of product liability claims against it while it assured the protection of public health and the firm's reputation. Neither the CFI nor the ECJ discussed this argument the plaintiff offered in support of the exclusive supply obligation it had bargained with its customers; by quoting *Hilti* they dismissed it by affirming that "[it is] *clearly not the task of an undertaking in a dominant position to take steps on its own initiative to eliminate products which, rightly or wrongly, it regards as dangerous or at least inferior in quality to its own products". Hilti, ¶ 118.*

Seems that the justification regulators offer for the *per se* ban of tying arrangements is that it minimises the chances of a dominant firm to keep on reaping further above-normal gains. Yet, the injunction of unjust enrichment is not and need not be the goal of antitrust legislation. Regulators should strike down oligopolies when they harm consumers, not when they misallocate profits among few suppliers. Monopoly misallocates resources because the monopolist must restrict output to maximise its revenues. This happens when it charges a single marketwide price; if it can charge the monopoly price to all who would pay it and a series of lower prices to others then it would produce the same amount as a competitive industry. Tie-in sales are a way of achieving this; when they do they are procompetitive and striking them down leaves everybody worse off. Bork (1993) 375.

A firm that engages in tie-in sales aims at a series of things among which there are (a) evasion of price regulation, (b) price discrimination, (c) non-discriminatory measurement of use, (d) economies of scale and (e) technological interdependence. Bowman (1957), 21-29. In brief, a seller can evade a regulated price by coupling the regulated product with an unregulated one for a higher or a lower price, depending on where the ceiling is placed; below or above the free market price respectively. It can also cut around the Robinson-Patman Act ban on discriminatory pricing, raise the price to heavy users and lower it to light users, ideally charging each customer the top price it is willing to pay. It can further use these profits to finance its return rates from the sales to different customers: this way it would not undercharge heavy users nor

overcharge light users. The benefit of the conveyance of such accurate information -though prices- to the market goes without saying. What are worth a bit of analysis are the synergies and the technological interdependence.

Synergies do exist in all sales. Every single product or service can be broken down to smaller components or inputs, which sold separately would cost much higher. These economies of scale play an important role for in the end of the day they define the products and the services to be sold; "An automobile and a can of pears are perceived as single products because it would be too expensive to require the seller to subdivide them further." Bork (1993), 379. Since the ultimate objective of antitrust law should be to maximise the welfare of the consumers by providing them lower prices for higher output, the law's approach towards tying shall be reviewed. To the extent tie-in sales contribute to the suppression of several costs -promotional, selling, administrative-, they elevate consumer welfare by offering lower prices.

What is more, consumer welfare is not about cutting costs exclusively; it is about offering consumers products and services they want too. If the adaptability of a component of a product is compromised and the latter's function is impaired due to specification incompatibility then technological interdependence guaranteed through tying is welcome. As a matter of fact it has been argued several times in the past – *United Shoe*. The most frequent counterargument is that the seller can assure compatibility by making these very specifications known and then let its buyers buy from anyone, who meets them. Goetz (2006), 585. Most expectedly, the manufacturer understands the technical peculiarities of its machines much better than anyone else, while the dissemination of the adequate information and the policing of compliance can be equally, if not more, expensive.

All in all it seems that tie-in sales are used to achieve synergies valuable not only to the seller but to the consumer as well. The reason why antitrust law still insists in overlooking them and sees in them nothing but the suppression of free-enterprise, may be due to the pre-Chicago School approaches toward the preservation of business rivalry and the protection of "worthy men" that still haunt antitrust law.

C. THE ESSENTIAL FACILITIES DOCTRINE

The same obstinate approaches led all the US federal circuit courts of appeals to recognise that antitrust law encompasses a "duty to deal", when refusing to do so stifles competition. The value of the essential facilities doctrine, the righteousness of compulsory dealing and the business freedom have fuelled one of the hottest debates not only in US antitrust academia but in US antitrust enforcement as well. Lower courts have made extensive use of the doctrine to try on questions, where a firm refused to deal with competitors or dealt with them on a discriminatory basis, and by doing so it allegedly prevented them from competing on the merits.

This approach however creates other problems that lower courts in their "nirvana fallacy" seem to have underestimated. Who is going to bear the administrative burden of determining the terms of access and who is going to compensate the holder the costs incurred for the acquisition or the development of the facility? These questions deterred the Supreme Court from ever endorsing the doctrine explicitly.

Until Trinko, a firm who refused to give reasonable access to an essential facility to its rivals was behaving in an anti-competitive manner under Sherman Act § 2. Terminal Railroad held that competitors should have been allowed access to a railroad terminal in St. Louis because that was essential for their ability to compete. The three-bridge terminal was the only feasible way to the west over the Mississippi river and was controlled by a group of railroad companies who refused to allow access to others. In order to establish exclusionary liability, four elements were presented: (a) the facility was under the control of a monopolist, (b) the competing firms lacked a realistic ability to reproduce the facility, (c) the competing firms were denied access to the facility while (d) it was possible for them to have it. Goetz (2006), 431. In other words, there had to be a firm with monopoly power over a market through a large market share or through the possession of an essential facility –the control-over-prices and the ability-to-exclude-competition criteria of Eastman Kodak- and a competitor who had a severe handicap in breaking in the market due to its inability to duplicate the facility. This very inability, the Court held, had to approximate a natural monopoly situation and it could not be inferred from mere inability to raise the required capital. Terminal Railroad, 397.

In Trinko the Supreme Court dismissed every rationale behind compulsory dealing. Nothing prevents firms from acquiring "market power by establishing an infrastructure that renders them uniquely suited to serve their customers". Trinko, 407. Compulsory sharing of infrastructure on the other hand can conflict with the purpose of antitrust law since it may lessen incentives for the monopolist, the rival or both to invest in research and development. Compulsory dealing can also increase the risk of collusion between competitors, "the supreme evil", which antitrust law seeks to suppress. Id., 409. After all Sherman Act does not and shall not compromise the freedom of a firm to deal with whomever it wishes - Colgate, 307. However, the dismissal of the essential facilities doctrine can be arguably said to be nominal. The Court did not depart from its quick-look/inherently suspect approach that will go after any monopolising practice with the view to drive competitors from the market on grounds other than superior efficiency; it just sorted this particular conduct in question under the general title "refusals to deal".

A corresponding doctrine has been used by the Commission to force dominant firms to afford access to their competitors to an essential productive input -Commercial Solvents-, to infrastructure facilities - Stena Sealink, - or to computer systems - Sabena. In these cases, one firm alone or a group of firms controlled a good or an infrastructure necessary for potential rivals to compete in a downstream market. In Stena Sealink, a ferry operator that controlled a port

and was allowed to set access conditions at its own will, deterred entry of competitors and was found to unlawfully maintain its proper monopoly.

The European Commission, DG Competition has defined as essential "a facility or infrastructure, which is necessary for reaching customers and/or enabling competitors to carry on their business [and whose] duplication is impossible or extremely difficult due to physical, geographical, legal or economic constraints".* It is thus clear that if the firm, or the group of firms, controlling the essential facility refuses its competitors access to it, then this refusal violates TEC Art. 82 as "limiting production, markets or technical development".

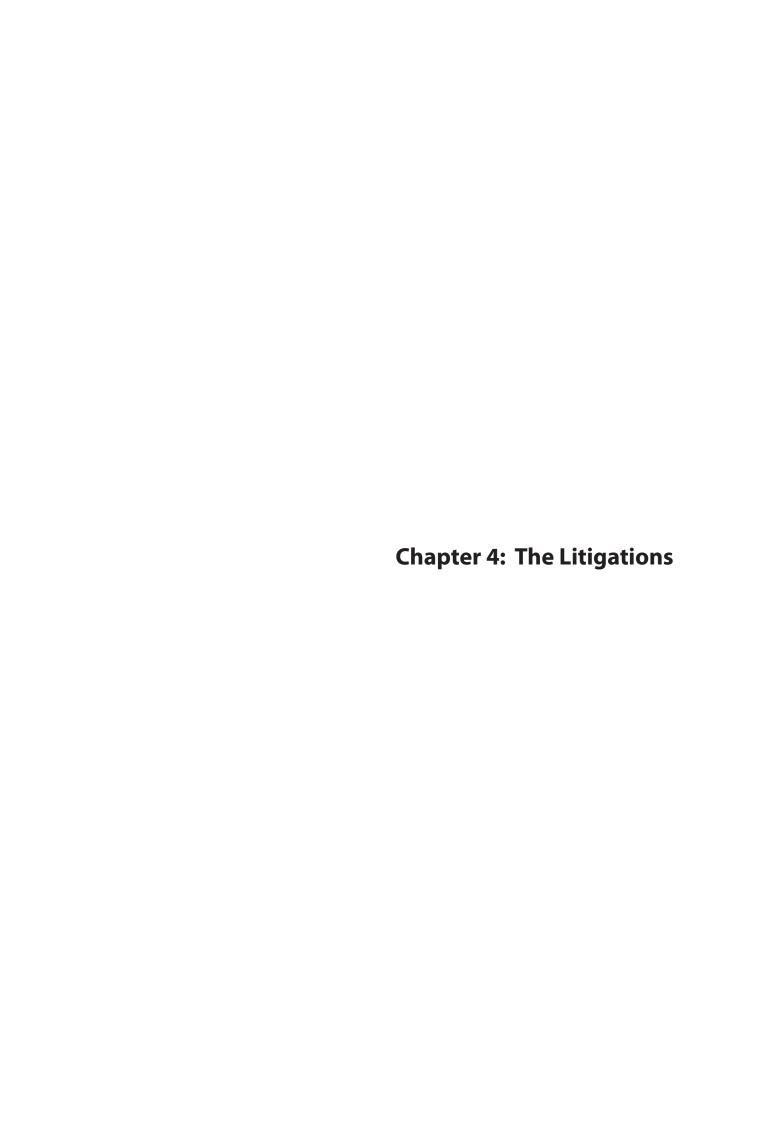
The EC version of the doctrine was consolidated in *Bronner*. There the ECJ limited the obligation on dominant firms to grant access to their facilities down to a narrow set of three circumstances: (a) the refusal of access to a facility must be likely to prevent any competition at all on the applicant's market, (b) the access must be indispensable or essential for carrying out the applicant's business and (c) the access must be denied without any objective justification. Bronner, ¶ 41. But what does "objective justification" mean? Would the protection of immaterial property qualify?

The Magill (upheld by CFI in RTE I, upheld by the ECJ in RTE II) and the IMS (upheld by CFI in IMS I, upheld by the ECJ in IMS II) ECJ ruled that the exercise of an IPR by a dominant firm could in effect involve monopolising conduct under extraordinary circumstances. This is when the input in question is indispensable for the production of a new product, which there is unsatisfied consumer demand for. Geradin (Dec. 2005), 8-9. In any case, the European Trinko has yet to be delivered; although ECJ has never formally adopted the essential facilities doctrine, it has never renounced it either.

The criticism the essential facilities doctrine has received till the present day is wide and fierce. The most concise summary of this critique is probably the last paragraph of the milestone article of the leading US antitrust scholar Phillip Areeda.

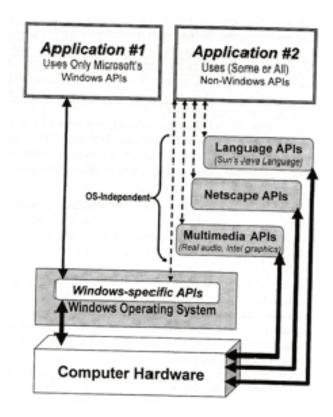
No court should impose a duty to deal that it cannot explain or adequately and reasonably supervise. The problem should be deemed irremedial by antitrust law when compulsory access requires the court to assume the day-to-day controls characteristic of a regulatory agency. Remedies may be practical (a) when admission to a consortium is at stake, especially at the outset, (b) when divestiture is otherwise appropriate and effective, or (c) when, as in Otter Tail, a regulatory agency already exists to control the terms of dealing. However, the availability of a remedy is not reason to grant one. Compulsory sharing should remain exceptional.

Areeda (1989), 853. Although we would happily extend Areeda's contention from judicial bodies exclusively to administrative agencies as well –like the European Commission–, we will refrain from doing so until we see the litigations' route.



What the litigations in both the US and the EC boiled down to, was the abusive exercise of the rights that IP law conferred to Microsoft with regard to some of its intangible assets, namely APIs. See, e.g., Czapracka (2008), 260-72. Before we go on to the proceedings themselves it would be useful to review some facts about the software industry.

Microsoft's alleged power in the marketplace is centered on its Windows operating system (OS) software, although the company is also a major applications vendor. The interaction of an OS with the installed applications is critical for the function of a PC. The OS performs the underlying functions of a computer, such as opening and closing files, memory management and communication with peripherals – keyboards, printers, modems, and networks. In short, the OS controls the hardware at the most basic level. On the other hand, applications are designed to perform specific tasks and run on the platform provided by the OS. Applications must communicate with it in order to request common pre-packaged services. Applications normally do this by calling the OS's application programming interfaces (APIs). For instance, application A, perhaps a word processing programme calls Windows APIs to receive services, such as text display, or keyboard input from the computer's hardware.



A problem for applications programme developers is that APIs are usually OS dependent; for instance, the API "call" that performs a particular function is written on a code specific for each OS. Historically a programme written for one OS could not be used on another one without the costly process of porting. The development of middleware had the potential to change this OS dependence.

The term "middleware" refers to software products that expose their own APIs for the use of applications programmers and thus potentially bypass either partially or completely, the OS own APIs. A middleware product written for Windows could supplant some or all of the OS valuable platform functions if developers began to use the middleware APIs for coding basic routines rather than relying upon the API set embedded in Windows itself.

If a particular piece of middleware was written for multiple OS its impact could be even greater. The more developers could rely upon the middleware APIs, the less expensive multiporting would be. Ultimately, if developers could write applications relying exclusively on APIs exposed by middleware, their applications would run on every OS which the middleware was also installed at. Netscape's Navigator, the Java Virtual Machines and certain media players are all middleware products written for multiple OS. Application B can bypass the Windows OS by relying on middleware APIs to communicate with the hardware.

Particular aspects of software production economics are also relevant to how the courts viewed the case.

Virtually all the costs of production are in the design of the software and therefore independent of the amount sold, so that marginal costs are virtually zero. There are also fixed costs in the need to risk large amounts of capital and the costs associated with developing a reputation as a quality supplier. Further, there are network externalities, in particular, the importance of an established product with a large installed base and the related advantage of a product that is compatible with complementary applications.

Installed base generally refers to the number of active users of a particular software product. A software product with a large installed base has several advantages relative to a new entrant. Consumers know that such a product is likely to be supported by the vendor with upgrades and service. Users of a product with a large installed base are more likely to find that their products are compatible with other products. They are more likely to be able successfully to exchange work products with their peers, because a large installed base makes it more likely that their peers will use the same product or compatible products. Installed base is particularly important to the economic success of an operating system software product. The value of the operating system is in its capability to run application software. The larger the installed base of a particular operating system, the more likely it is that software vendors will write programs that run on that operating system, and, in this circular fashion, the more valuable the operating system will be to consumers. Goetz (2006), 465-67.

Section I The US Saga

A. THE EPISODES

Microsoft I

In 1990, the FTC began investigating Microsoft 's acquisition and maintenance of monopoly power in the software market. When faced with the decision whether to file a complaint against the firm or not, the 5-member panel reached a deadlock; two Commissioners voted in favour of the motion and two against, while one recused himself. The agency suspended the investigations but three years later the Department of Justice, Antitrust Division took up the case on its own initiative – "[...] a rather rare occurrence". Microsoft I.

Using the FTC's files the DoJ consolidated 21 civil antitrust complaints against Microsoft and in 1994 submitted them in front of the US District Court for the District of Columbia. The suit invoked Sherman Act §§ 1 and 2, charging Microsoft with monopolisation in the OS market through the exclusive dealing agreements it concluded with various OEMs and ISVs.

The key anticompetitive practice Microsoft allegedly engaged in was the conclusion of perprocessor purchase contracts with hardware manufacturers. Per these contracts the OEMs paid Microsoft a standard royalty for each computer sold regardless of whether the computer "run" on Windows or any other OS. The practical effect of these licenses was to deter the OEMs from using competing OSs during the life of their contracts with Microsoft. Discounts based on volume can be procompetitive but a seller with market power can structure them in a way so as to force buyers to buy all their supplies from it. Where such a result occurs, the volume discount would unlawfully foreclose rival suppliers from the market. *Microsoft I*, "Competitive Impact Statement", 59 FedReg 42,854. What is more, the same contracts contained excessively long terms, in that they often lasted for more than 5 years, a period well beyond the product life of an OS. The minimum purchase requirements were high as well and the contracts permitted the manufacturers to transfer any unperformed quantity requirements to future orders provided that they continued to buy Microsoft. These two facts coupled, stretched out the effective period of the lock up even further. OECD (1997), 31.

Microsoft tried to pull strings not only in the hardware market but in the software market as well; in exchange for information and advance test releases of new OS and API versions, Microsoft tied ISVs to onerous non-disclosure agreements. The ISVs provided applications software that runs on the OS and enables the user to perform several tasks. Apart from lawfully protecting Windows from disclosure of confidential information to competing OS developers, these agreements aimed also at unlawfully discouraging ISVs from upstream integration –in

fact, what discouraged them from was the development of their own OSs- or from the mere software developing for competing OSs. So, what the company did was using its dominant position in order to induce downstream competitors to engage in agreements that supported this very position. Along with the suit, the DoJ filed a consent decree, which summarised what the US government thought Microsoft should do to rectify the situation it created on the software market. The firm concurred and the parties avoided a trial on the merits. The district court however denied its approval on the basis that the decree was not in the public interest. The DoJ appealed and the appellate court held that the trial court exceeded its authority in concluding that the consent decree was not in the public interest, that it was not empowered to go beyond the evaluation of the civil antitrust claims and that it was biased. The Circuit Court reversed the District Court and remanded with instructions for the case to be assigned to another judge and an order to be entered approving the consent decree. This decree was the product of negotiations between the firm on the one side and the DoJ and the European Commission on the other. Microsoft II.

Microsoft II

Then, in 1998 the DoJ took up again the case and accused Microsoft of violating the decree that time. By distributing Windows 95 and IE jointly to the OEMs and further prohibiting them to tamper with the product, respondent allegedly violated its obligation to refrain from concluding any kind of licensing agreement, which would condition the distribution of a software product upon the distribution of an other, providing that this condition is not the result of software development. Notwithstanding the dismissal of the DoJ's argumentation, the trial court did enter a preliminary injunction in its favour and barred Microsoft from further licensing its OS upon its browser.

Both parties objected the court's reasoning and attacked the decision on procedural grounds. The appellate court held that the bundling of IE to Windows 95 was permitted under the integration defence. Yet, it made clear that it decided on the matter sub judice, alluding to any possible independent violation of the Sherman Act § 2.

Microsoft III

The Circuit Court's last contention left the door open for a full-blown trial on the merits, a chance the DoJ did not miss. In May 1998 the government of the United States, assisted by the governments of the States of New York and Wisconsin, which acted in their capacity of parentes patriae, filed a lawsuit against Microsoft. They accused the firm of antitrust law violations and sought preliminary and permanent injunctions against the allegedly unlawful conduct. This conduct consisted of (a) unlawful maintenance of monopoly power in the PC OS market in violation of § 2, (b) unlawful attempted monopolisation of the web browser market in violation of § 2, (c) exclusive dealing in violation of § 1 and (d) unlawful tying of IE to Windows 95 and Windows 98 in violation of § 1. Plaintiffs contended that Microsoft's goal was to "unseat" Netscape's Navigator as the major web browser. *Microsoft III*, 47.

Per the Court's request, the plaintiffs subsequently proposed the remedy to be sought. The remedial order provided for a "fencing in" of Microsoft; amongst other behavioural remedies, Microsoft was ordered to disclose to developers the APIs and the technical information necessary to ensure the software interoperability with the Windows OS and to establish a secure facility, at which rivals could have unfettered access to the OS source code. The order went farther to bar the firm from any tying activity, while it dictated that in case consumers are offered bundled goods, they have to be offered an unbundled version as well. The order provided for a structural remedy as well: divestiture. Microsoft would split into an Ops Co., which would get the OS development, and an Apps Co., which would receive the remainder of the firms's business. After that Microsoft requested the proceedings to resume in light of new evidence, but the Court dismissed the request and adopted the plaintiffs' proposed remedy without substantial changes. Microsoft attacked the decision immediately but due to a peculiarity of US law the case was directly moved to the Supreme Court.* The States petitioned the Supreme Court* for a writ of *certiorari* but the Justices declined to hear the appeal and remanded the case to the US Court of Appeals for the DC Circuit.

B. THE CONFLICTING LEGAL PRECEDENT

Microsoft was found to be the undisputed leader of the software market. Sherman Act § 2 has left to the courts the elaboration of what "monopolisation" and "attempt to monopolise" actually are. At the same time, antitrust recognises that a firm with lawful monopoly power has no general duty to help its competitors. Yet, exclusionary practices are the source of most of the abuses. In such a case how can we tell abusive and lawful refusal to deals apart?

There is a distinction between not helping competitors and behaviour that actively injures competition by undercutting the rivals' legitimate expectation to compete. Case-law provides that wrongful intent need not be established. There must rather be an active predatory conduct that harms competition, as contrasted with mere dealing denial. If the conduct provides boons for consumers, serving their welfare then it is legal. If on the other hand, the result of this practice is the undercutting of competitors then it may well be illegal – the rule-of-reason review will decide. In any case, the effects of predation should be market-wide in order to infer

^{* &}quot;An appeal from a final judgment pursuant to subsection (a) shall lie directly to the Supreme Court if, upon application of a party filed within fifteen days of the filing of a notice of appeal, the district judge who adjudicated the case enters an order stating that immediate consideration of the appeal by the Supreme Court is of general public importance in the administration of justice". 15 USC § 29.

injury to competition; the protection of individual competitors is beyond the objectives of antitrust law. OECD (1996), 253.

However the success of predation schemes is inherently uncertain, for it depends in maintaining monopoly power for long enough both to recoup the predator's losses and to harvest some additional gain. Absent some assurance that the desirable monopoly will materialise, and be sustained for a significant period of time "[t]he predator must make a substantial investment with no assurance that it will pay off". Easterbrook (1981), 268; see also, Bork (1993), 145.

Despite these objections courts have identified four conducts that when employed by a monopolist can potentially be abusive. The first is exclusive dealing, where the firm requires its customers or suppliers not to deal with competitors, in exchange for financial incentives. These usually take the form of loyalty discounts - Tampa Electric. The second is below-cost pricing, which aims at financially suffocate a rival and eventually drive them from the market -Liggett. The price race-to-the-bottom, which predatory pricing requires however, raises exactly the feasibility doubts discussed previously. Tying, the third abuse, happens when a supplier bundles together two distinct products without any procompetitive justification for doing so -Eastman Kodak. This practice is banned as unlawful per se and can create trouble for firms that are still far from possessing or even acquiring monopoly power. The last restrictive device is refusal to deal and it is closely affiliated to the essential facilities doctrine; when a dominant firm withholds control over a productive input without offering any valid justification for that in exceptional circumstances, it runs the risk of drawing the attention of US antitrust regulators - Trinko.

C. TO EXPLORE OR TO NAVIGATE THE WEB?

In Microsoft III the trial court -the sole fact finder in the US court system- held the firm liable for a § 1 tying violation and for § 2 monopolisation and attempted monopolisation violations - respondent was acquitted for the § 1 exclusive dealing claim due to lack of evidence. The tying of the IE and the APIs to the Windows OS was condemned right away as unlawful per se. What accounted for monopolisation and attempted monopolisation were the various onerous dealings Microsoft concluded with OEMs, ISVs, IAPs, ICPs and Apple and the way it integrated its browser into its OS, its efforts to undermine Sun's Java technology through the release of a "polluted" version and its conduct in the overall respectively.

Monopolisation

The monopolisation count requires the proof of two things: the existence of market power and abuse thereof. Antitrust regulators usually calculate the share of a firm and then use it as proxy in order to decide whether the firm has power over the market or not. The task of defining the market the correct way is very demanding and consumes large amounts of judicial resources in an antitrust claim. Microsoft argued for a wide market definition supported by the existence of competing OSs. The Court on the other side insisted that the *reasonably* interchangeable products were Intel-compatible PC operating systems, leaving off the market several other OS, such as the Mac OS of Apple or other UNIX-based systems.

The burden of the proof of the abuse is bore by the plaintiff, who has to establish a *prima facie* case under § 2 in order to avoid having his lawsuit dismissed. Defendant then may offer a solid procompetitive justification; if it guarantees higher efficiency or enhanced consumer appeal the suspicious conduct should really be competition on the merits. Bork (1993), 312. If the court accepts the defendant's justification then the burden shifts back to the plaintiff, who has to demonstrate that the competitive scale leans towards harm more that benefit. The consideration of whether the conduct in question injures competition on balance is independent from malicious intent; it rests instead upon the effectiveness of the conduct in foreclosing competition.

The DoJ never alleged that Microsoft obtained its monopoly position in violation of the antitrust laws. It was rather a haphazard fact: IBM chose for its PCs the operating system introduced by Microsoft –the then MS-DOS–, which led Microsoft to obtain an installed base of millions of IBM, and IBM-compatible, PCs – *Microsoft I*, 1453.* What contributed to the preservation of this installed base for so long have been, to the Court's belief, the high costs in switching to something other than Intel-Compatible PCs and the limitations of the market to present promptly to consumers something new in response to an increase in prices above the competitive levels. These findings seem to satisfy the oligopoly definition contained in the US DoJ/FTC, Horizontal Merger Guidelines. The paralysis of both supply and demand substitution is obvious: neither the OS manufacturers can break in the market in response to a price increase nor the consumers/users can switch products.

What the trier found there were market externalities, the kind which is inextricably paired to networks. The success Microsoft experienced gave birth to a chicken-and-egg problem, or otherwise in sophisticated antitrust jargon, raised a very high applications barrier to entry. The median user will use the OS, which there is already an array of programmes and applications for and which it seems far more probable that new applications will be written on. This trend will not shift unless the user is presented with an alternative range of applications. And developers will not write these alternative applications on their turn until the rival OS acquires a large installed base.

^{* &}quot;Intel-compatible PCs" and "IBM-compatible PCs" are identical terms. Back in 1981 these PCs were the first real mass production models, which were manufactured by IBM, contained Intel microprocessors and run on MS-DOS.

In such a highly protected market Microsoft was found to control 95%. This market share justified for the court the questionable contention that the acts supporting the inference of market power suffice to create the inference of monopolistic conduct as well. This was premised on the opinion that the conduct Microsoft engaged in was not directed against its competitors but focused on the preservation of the high barriers to entry and on the belief that the same conduct was advantageous only if it was implemented to reinforce the firm's monopoly power. "Microsoft expends a significant portion of its monopoly power, which could otherwise be spent maximizing price, on imposing burdensome restrictions on its customers - and in inducing them to behave in ways- that augment and prolong that monopoly power". Microsoft III, Findings of Law, ¶ 66. To further buttress this stance the court referred to the firm's own assessment that piracy continued to be the main competition, to the fact that it did not consider the price of competing OSs when it set the prices of Windows and its licensing policy to prohibit the user from installing the system in another machine. Consequently the ability of Microsoft to price independently is as undisputed as the inexistence of a legal secondary market for Windows, under its licensing policy.

Under these protective circumstances, the firm's conduct couldn't do but act in maintenance and in furtherance of its dominant position. The respondent focused on to versions of middleware, which when combined could weaken significantly the applications barrier. These were Netscape's Navigator browser and Sun Microsystems' Java Virtual Machines. The function Microsoft regarded as threatening was that the Navigator exposed Windows APIs essential for the JVM to work properly. Then, the JVM offered to a number of third-party OS-independent applications the runtime environment they needed to work. It is obvious that this would create a new generation of applications that would work on whatever OS reducing considerably the high switching costs for the users. Quite an undesirable scenario for Microsoft.

What the firm's executives seem to have come up with was an offensive strategy of exclusive dealing and exercise of market power that aimed against Netscape and Sun. The first step was to propose to Netscape a "special relationship": Netscape would abandon the development of Win32 browsers but it would keep the older Win16 versions and exclusively get the browser development for Apple's Mac and other UNIX-based OSs. This market allocation agreement sank. Microsoft however did not stop. It subsequently launched a two-prong campaign against Navigator, which aimed at making IE present in every computer and at putting as much hurdles to the installation and use of Navigator as possible.

Microsoft refused to release versions of Windows without the IE and restricted first contractually and then technically the ability of the OEMs and the users to remove it. The first goal was attained through the placement of browsing-specific code in the same files that contained OS function codes; this way the deletion of any file containing browsing codes would also delete

OS codes, crashing Windows. What manufacturers could do in response was to install Navigator from scratch but this could hardly be profitable as a browser would already be installed. Users were barred from uninstalling IE as well through the removal of IE from the "Add/Remove Programs" utility of Windows 98; this further disincentivised OEMs from installing rival browsers and ensured that the OS could sometimes override the preference of the user and launch IE rather than the default browser, as it actually did. This last policy was the only one justified adequately on the technical reasons Microsoft offered the court. Microsoft III, 72.

Moreover, Microsoft used its leverage to impose on OEMs terms that would further restrict their ability to install Navigator. The manufacturers therefore gave away their ability to tamper with the original boot sequence or to reconfigure the preinstalled desktop so as to be impossible for them to install any other browser before the OS installation. The concern was not the fragmentation of the OS platform but the exposure of the APIs by the preinstalled middleware. Microsoft III, Findings of Law, ¶ 227. These restrictions contained both the extension of the use of Navigator and of the exposure of the APIs.

Against these findings the firm invoked the IP defence and reclaimed its right to use its own intellectual property at will; by not framing the OEMs Windows would run the risk of substantial alteration of copyrighted work and a serious deterioration of their "principal value [...] as a stable and consistent platform that supports a broad range of applications and that is familiar to users". Microsoft III, 61. The Court accepted the first argumentation but dismissed the second as unsubstantiated.

Microsoft further dealt, in exclusive terms, with IAPs affording them significant "desktop real estate" in exchange for the promotion of IE, sometimes overtly over Navigator. It also withheld a scripting tool that Netscape needed to make its browser compatible with certain dial-up IAPs. The effect of these deals was to ensure that many of the web-centered applications would rely on the Windows browsing technology and that the majority of users would use IE instead of Navigator. Id., 271 ¶ 340. Microsoft failed to argue in favour of the merits of these practices; it just supported that they did not bar Netscape from all distribution channels. Thus it did not avoid the § 2 liability.

Despite the fact that the attempts of Microsoft to contain the use of Navigator to as few users as possible did not harm consumers on their face -the bundle was offered at no additional cost- they acted to the detriment of software market's efficiency in general. The only goal of the firm was the preservation of the applications barriers to entry through the dissemination of IE. Otherwise, no company would bundle its products asking for nothing in return and at the same time engage in vertical collusion at high costs. *Id.*, 108 ¶ 136.

Sun Microsystems was the next target. Its JVM, when coupled with the Netscape browser middleware, tore down the barriers Microsoft strove to keep high; the exposure of the Windows

APIs would lead to the development of cross-platform applications, which could challenge the Windows leadership. In order to tackle this threat Microsoft exercised its leverage over the market in order to force major ISVs to exclusively promote Microsoft's JVM and to coerce Intel to cease providing Sun with information necessary for the enhancement of the Java technology. It additionally released a "polluted" Java version, which called pieces of the OS source code more effectively than Sun's JVM, and provided developers with information that was supposed to facilitate the calling of OS but instead assured the exclusive compatibility of their applications with its own JVM. The same course of conduct was followed with other middleware and their developers too: Lotus Note suite of IBM, Quicktime of Apple and RealPlayer of Real-Networks.

In the meantime, the manufacturer of the OS compatible processors, Intel, started doubting the compatibility of the Windows APIs and DDIs with the ever-growing capabilities of its CPUs. In an attempt to give its users the processing speed it promised them, Intel released NSP updates, which exposed Intel's software and hardware APIs so that third-arty applications could use the CPUs up. Microsoft reacted to that by putting pressure on the OEMs to refrain from installing these updates. As a matter of fact, the judge supported that until the case was tried in 1998 Microsoft had delayed in implementing the key capabilities that Intel had been to offer its customers in 1995. Id., 81 ¶ 101.

The monopolisation review for Microsoft closes with an incident of industrial blackmail. The victim was Apple. Until 2003 when it released the first beta of its own browser Safari, the company was using third-party browsing software. Back in the time of Microsoft III the Mac OS was distributed with IE; yet Navigator was the default browser. The most famous word processing suite amongst Mac users was the Mac version of Microsoft's Office. Within the copious attempts of the latter to fight Navigator, Apple was threatened that Office:Mac was to be discontinued, unless it distributed and promoted IE along with its OS. Under the threat of what could have well been its tombstone, Apple capitulated. Id., 274 ¶ 344. The fact that Microsoft was more than willing to sacrifice the sunk costs of the development of a suite for a competing OS, the substantial profits generated from its deep penetration into that platform and its goodwill among Apple users, clearly shows that respondent's exclusive goal was the protection of the applications barrier to entry.

Attempted Monopolisation

Contrary to what happens with the market monopolisation claim, the attempt-to-monopolise claim requires the plaintiff to show that (a) the defendant has engaged in predatory or anticompetitive conduct with (b) a specific intent to monopolise and (3) a dangerous probability of success. Why intent does play a role here? Because in a monopolisation case the intent of a leader to monopolise is inferred by its ability to do so at will. The exercise of a firm's power beyond normal levels that aims at inducing third parties to do things they wouldn't otherwise do, needs not be buttressed by any specific intent so as to create the inference of market abuse.

The district judge held that the "special relationship" Microsoft proposed to Netscape, should it become effective, satisfied all the elements of attempted monopolisation. The proposed agreement was an anticompetitive device, which would result in an oligopolistic browser market. What is more, the court admitted that the very proposal of such relationship proved its feasibility, while it stated that the course of action the firm followed after Netscape turned down the offer revived the dangerous probability of successful monopolisation.

Upon remand to the appellate court, Microsoft argued against the self-presumptive character of the trial court's reasoning and criticised the far-reaching inference of its alleged attempt to monopolise the browser market from its abuse of the OS market. The defences the counterparties offered didn't persuade the Circuit Judges, who acquitted Microsoft on the attempted monopolisation count. *Microsoft III*, 81.

Tying

US case-law has held from time and again that tying arrangements unreasonably stifle competition and therefore are unacceptable on their face. The Supreme Court has refrained from the application of an absolute *per se* rule and has opted for a quick-look/inherently suspect approach: there are certain bundles, which can confer benefits to consumers. These procompetitive benefits are what the defendant has to offer the court in order to rebut the plaintiff's allegations that the conduct in question unreasonably restraints competition.

The bundle of IE to the OS not only supported a Sec. 2 liability claim but was found violative of Sec. 1 as well. As a matter of law the District Court held that the bundle did satisfy the tying test and condemned it as *per se* unlawful. The Circuit Court on the other hand for fear of stunting valuable innovation in a market, whose function it could not completely understand, reversed and instructed the plaintiffs to make out a rule-of-reason case; if Microsoft was successful in offering the court solid procompetitive excuses for the bundle then the plaintiffs should have been ready to show that the harm still outweighed the benefit. But, what was the harm and what was the benefit?

The harm was the foreclosure of the OEMs' and the users' ability to install a browser other than IE as the default browsing application. The benefit was the purchase of two different products at no additional cost and the enhanced functionality of the tied good. Courts have never before ruled on a tying case, where the defendant argued for the utility maximisation of the tied good; usually it was the tying good's value that was boosted. Here Microsoft argued

that the tie maximised the utility of IE, through its enhanced ability to call, via the OS itself, other software.

The complete physical and technological integration of the OS and the IE went well beyond the ability of the separate-product test, used in order to estimate the net efficiency of the bundle. In the meanwhile the appellate court had admitted that the "pervasively innovative character" of platform software markets may create efficiencies that were not anticipated when the per se ban on tying was originally factored. *Id.*, 93. The basis for this thought was the finding that the integration of multiple applications had been a sector-wide practice, performed even by firms not in a strength position. Therefore the Court argued, it could not dismiss the IE/Windows bundle as pernicious and of no redeeming value and remanded the case to the District Court to be tried under the rule-of-reason review.

Finally, the Circuit Court ruled against the remedial order admitted by the trial court on the procedural grounds that the firm's case on the proposed injunction was not properly heard. *Id.*, 101.

D ... MICROSOFT IV?

The Microsoft saga in the US had an arguably inglorious end. After almost 11 years, three trials –all of which reached the appellate court level–, several reverse and remand orders –one which from the Supreme Court– and a divestiture order that never substantiated, it seems that the Microsoft courts failed to satisfy the provisions of common-law in antitrust and *prescribe* an appropriate relief.

[I]t is the duty of the court to prescribe relief which will terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation and ensure that there remain no practices likely to result in monopolization in the future. [...] The trial court is charged with inscapable responsibility to achieve this objective, although it may... accept a formula for achieving the result by means less drastic than immediate dissolution or divestiture – *United Shoe*, 250.

After the remand order of the US Court of Appeals for the DC Circuit in *Microsoft III* the DoJ abandoned its quest for the kind of the structural remedy it had requested and probably gotten, should the District Court's decision have been affirmed. The US government then negotiated an elaborate settlement agreement with Microsoft, which received no less criticism than the trials did.

The firm agreed to freely provide desktop real-estate to OEMs and to disclose the APIs to all kinds of third-party software developers so they can write interoperable applications. On the

other hand it retained the right to override the user's default settings in case these settings deteriorated the functionality of its own software. Goetz (1993), 476. However adequate these measures may seem in addressing the matters that were raised during the litigations, the vagueness of their detailed provisions was deemed to allow for loopholes that the firm could take advantage of once more.

Section II The European Hide 'n' Seek

A. THE GAME TO PLAY...

The story of the Microsoft litigations in Europe starts about the same time it did in the US. In 1993 and while the US DoJ was taking up the investigation from the hands of the deadlocked FTC, Novell –an ISV– filed a complaint against Microsoft with the European Commission. The coincidence of antitrust investigations on the two major antitrust jurisdictions set off an extensive opinion exchange from the part of the competent regulators on the Windows licensing policies. The cooperation culminated into the setting up of a joint team by the DoJ, Antitrust Division and the European Commission, DG Competition. The team engaged in negotiations with Microsoft, which resulted in a settlement pursuant to which the firm changed its licensing agreements with OEMs; the settlement took the form of an undertaking to the Commission and a consent decree in the US.

Four years later, in 1997 the DoJ, Antitrust Division and the Commission's DG Competition received a new complaint about Microsoft from an American software company specialising in network computing. The complainant had entered with Microsoft into agreements, whose terms acted in maintenance or in furtherance of the latter's dominant position. It is not rare in the US, parties who collude in restraint of competition to end up trying to break out of them by invoking Sherman Act. The European Commission issued a statement of objections on behalf of both the EC and the US regulators, which got accepted from Microsoft.

At the same time DG Competition launched a new investigation of the vertical agreements Microsoft had concluded with some European IAPs. The firm was requested to re-examine the agreements under EC competition law to ensure that they didn't foreclose access to the browser market or that they didn't promote exclusively Microsoft's internet technology. Microsoft complied once more and conceded amendments to the agreements. Under the old regime of the TEC Art. 81(1), the Commission issued the required comfort letters and "cleared" the agreements between Microsoft and ISPs. Id.

During this last investigation the Commission did not review the general behaviour of Microsoft, in search for any possible abuse of dominant position within the European single market. The core proceedings began in December 1998, when Sun Microsystems filed a complaint

with the European Commission. Sun alleged that Microsoft ceased to share technology and information, necessary to ensure that the former's server OS and the latter's Windows PC OS interoperated. Sun not only did attack the Windows OS, where the US cases mostly focused on, but specific applications that were integrated into the competing Windows server OS as well. Sun requested those applications' programme interfaces be exposed and made available for use. The whole motion was premised on the contention that by withholding API technology and information, Microsoft was denying Sun access to a facility it needed to compete.

After six years of investigations, during which three statements of objections were communicated to the firm, the Commission reached its Decision. Microsoft was held liable for an Art. 82 violation (a) by having refused since October 1998 to supply its rivals in the server OS market with API information necessary for their products to interoperate with Windows and hence to compete in the market and (b) by having tied since May 1999 its WMP to the Windows OS. For these two infringements, the Commission imposed the largest fine in competition law history −€ 497,196,304− and the behavioural remedies (a) of disclosure of the necessary APIs that would allow third-party applications to interoperate with Windows and to make that information available on reasonable terms within 120 days and (b) of the offering of a version of Windows without the 186 media functionality files of WMP, within 90 days. *Microsoft*, arts. 5(a) and 6(a).

The controversial decision attracted wide criticism; its most prominent source is arguably Hew Pate, the then US Assistant Attorney General for Antitrust.

Imposing antitrust liability on the basis of product enhancements and imposing 'code removal' remedies may produce unintended consequences. Sound antitrust policy must avoid chilling innovation and competition even by 'dominant' companies. A contrary approach risks protecting competitors, not competition, in ways that may ultimately harm innovation and the consumers that benefit from it. It is significant that the U.S. district court considered and rejected a similar remedy in the U.S. litigation.

While the imposition of a civil fine is a customary and accepted aspect of EC antitrust enforcement, it is unfortunate that the largest antitrust fine ever levied will now be imposed in a case of unilateral competitive conduct, the most ambiguous and controversial area of antitrust enforcement. For this fine to surpass even the fines levied against members of the most notorious price fixing cartels may send an unfortunate message about the appropriate hierarchy of enforcement priorities. Pate (2004).

Three months later on June 2004, Microsoft filed with the CFI an action for the annulment of the Commission decision or for the substantial reduction of the fine imposed and an interim measures application for the remedies to be suspended.

B. THE CONTRASTING ACQUIS

Article 82 of the Treaty of Rome contains a non-exhaustive list of abuses of dominant position. One type of abuses involves excessive pricing, but these situations are rare and usually arise in narrow market situations. Price discrimination is another case of actionable abuse, where a dominant firm discriminates amongst customers within the single market with no objective justification. An exclusionary type of price discrimination occurs where an incumbent in a dominant position, seeking to drive out a small competitor, picks up a major customer of the small competitor through the offer of predatory prices – *AKZO*. Refusals to supply abuses are an other type. This often happens when a dominant firm integrates downstream into an activity it had not previously engaged in and cuts off supply of a productive input to downstream competitors, like it happened with the Windows server OS. OECD (1996), 224.

There is a number of cases related to exclusive dealing –*TetraPak*– and tying – *Hilti*. Similar are the cases involving secondary markets. The key in these cases is the extent of information that the purchaser has before buying. It is not always the case that consumers know about aftermarket costs, such as repair and maintenance. Mirroring recent US case-law, the position of the EC *acquis* on the matter holds that information asymmetries between the median and the sophisticated users leads to market fragmentation and to situations lagging behind perfect competition. The subsequent inequilibrium creates market loopholes that a dominant firm can take advantage of to the detriment of competition and consumers. *Id.*, 225.

The last series of cases involve intellectual property rights. Article 295 of the Treaty explicitly protects private property, which includes intellectual property. This does not mean that the TEC confers immunity to IPR holders from its free movement of competition provisions; what it means is that the goals of the Treaty must be attained with the proper respect to these rights and that the exercise thereof comes under the Treaty. Article 82 does not oblige a dominant firm to aid its competitors; however, in case the dominance is due to the monopoly conferred by an IPR the abusive exercise of this right through refusal to deal/license is clearly anticompetitive.

The applicable *dictum* was identified for the first time in *Magill*. The business conduct, which aims at preventing the development of a new product with market potential through means of invoking an IPR is anticompetitive and actionable per TEC Art. 82. The exercise of the IPR in question goes beyond its *effet utile*, excludes all potential competition and secures the dominance of the holder. The decision was widely criticised for breaking with "well-established legal"

^{*} Ian S. Forrester, QC, was one of the attorneys defending Microsoft in front of the CFI.

principles" and for risking to "discourage investment in intellectual property". Forrester (Apr. 2005), 937.*

Despite the critique, the Commission insisted and affirmed this reasoning in IMS. A dominant undertaking may be ordered to license its intellectual property rights when (a) the product or service to which access is sought is indispensable for carrying on a particular business, (b) the refusal is such as to exclude any competition on a secondary market, (c) it prevents the emergence of a new product for which there is a potential consumer demand and (d) the refusal is not justified by objective considerations. IMS, $\P\P$ 37-38. The application of these conditions is cumulative; they are to be interpreted restrictively with the view of buttressing competition without deterring investment and innovation or criminalising business success.

The Commission also accused Microsoft of tying its WMP to its operating system, forcing users who wanted to buy the Windows OS to have this media player as the default streaming application. This conduct is actionable under both TEC Art. 81 and 82.

Which one should we apply then? Case-law has applied these two articles in a consistent manner with a view to achieving identical objectives. OECD (2005), 226. The similarity of the texts of the two provisions prohibiting the same type of practices requires the adoption of a single approach when analysing practices that fall under them. Should the answer be both then? If yes, why are their provisions separate? The reason is that they function at a different level: the fact that "[...] the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts [may well contribute] to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit", does not preclude the injunction of such a contracting policy. In other words, the application of the Art. 81(3) safe-harbour does not prevent the Art. 82(d) condemnation of dominant firm tying.

C. GONE WITH THE STREAM ...

Refusal to Deal

What Microsoft was charged primarily by European regulators was its refusal to share with its rivals on the server OS market the interoperability information they allegedly needed in order to be able to compete with it. The disclosure of the specifications and the free access the rivals requested for contradicted with the firm's right to protect its intellectual property. Microsoft, \P 546. The Commission however referred to Magill, where it was held that the refusal to license by an IPR holder cannot in itself constitute an abuse of dominant position, notwithstanding the holder actually being a dominant firm. Magill, ¶ 2. The exercise of IPR does involve abusive

conduct only "in exceptional circumstances": the disruption of previous levels of supply can be such an exceptional circumstance although it is not necessary for the inference of abuse – Commercial Solvents.

The Commission addressed one by one the conditions that were set by the ECJ in *Magill*. First, it established that Microsoft had effectively ceased to supply interoperability information and disallowed its use for the development of servers compatible with Windows.

A historic look at the work group server operating system market shows that Microsoft entered this market relatively recently. UNIX vendors and Novell were the first developers with significant activity and success in this area. Customers had started to build work group networks that contained non Microsoft work group servers and Microsoft's competitors had a distinct technological lead. The value that their products brought to the network also augmented the PC OS's value in the customers' eyes and therefore Microsoft as long as it did not have a credible work group server operating system alternative had incentives to have its client PC operating system interoperate with non Microsoft work group server operating systems. While entering the work group server operating system market, pledging support for already established technologies was important in gaining a foothold and the confidence of the customers.

Once Microsoft's work group server gained acceptance in the market, however, Microsoft's incentives changed and holding back access to information relating to interoperability with the Windows environment started to make sense. With Windows 2000, Microsoft then engaged in a strategy of diminishing previous levels of supply of interoperability information. This disruption of previous levels of supply concerns elements that pertain to the core tasks that are expected from work group server operating systems, and in particular to the provision of group and user administration services. *Microsoft*, ¶¶ 587-88.

Assuming that the Commission is right on the facts, its argument that Microsoft progressively starved its competitors from the interoperability it used to provide to them when it had no commercial presence in the server market stands unrebutted. This is true for first, the argument is very much in the vein of *Commercial Solvents*. In that case, a firm –Commercial Solvents– was providing an essential input to another firm until the day it decided it wanted to enter into the market on which this other firm was active. The Court confirmed the decision of the Commission which had condemned Commercial Solvents for this conduct and ruled that "an undertaking which has a dominant position in the market in raw materials and which, with the object of reserving such raw material for manufacturing its own derivatives, refuses to supply a customer, which is itself a manufacturer of these derivatives, and therefore risks eliminating all competition on the part of this customer, is abusing its dominant position within the meaning of

Article [82]". Commercial Solvents, ¶ 25.

Second, disrupting prior levels of supply is one of the primary forms of predation. Were it to be tolerated would place any firm buying an essential input from a potential competitor at the latter's mercy. The upstream dominant competitor would be able to commercially suffocate its downstream competitor at will.

At the same time it can be arguably counterargued that by holding dominant firms liable for TEC Art. 82 violations through the disruption of prior supply levels, may create perverse incentives for them to refrain from ever supplying such inputs to competitors as they may then be forced to deal with them. As Einer Elhauge put it, "[l]imiting any monopolist's duty to deal to cases where the monopolist terminated an existing willingness to supply rivals would create perverse incentives for a monopolist to refrain from ever dealing with a rival, even if ti were otherwise inclined to do so, out of fear that this proposed antitrust rule would convert any such dealing into the sort of lifetime tenure normally reserved for professor". Elhauge (2003), 314. For a dominant supplier, refusing to supply downstream operators in case it may subsequently decide to enter the downstream market in question may not necessarily be a rational strategy as it implies that it will have to forego sales revenues until the moment of entry. Allowing however other firms to give birth and bring up a downstream market may be an effective launching pad for a successful subsequent entry, as it seems to be illustrated by Microsoft's attitude in the server market.

The disruption of prior supply levels of interoperability information creates a risk of elimination of competition in the server market. The Commission argued that while Microsoft's market share for server OSs boomed, its competitors' market shares have consistently declined. Microsoft, ¶¶ 590-612. It also argued that there was a link between Microsoft's refusal to supply interoperability related information to its competitors and the elimination of competition in the server market. The firm denied, contra arguendo, that the lack of interoperability disclosures eliminated competition and that, in any event, these disclosures were necessary. There were several substitutes for disclosure. For the Commission, interoperability disclosures were essential to Microsoft's competitors in the server market and Microsoft's refusal to provide them foreclosed competition to a great extent.

Assuming that the facts reflected the reality of the market, one could agree that the Commission addressed the conditions imposed by the ECJ in Magill and IMS for establishing that a refusal to supply a product protected by an intellectual property right amounts to an abuse of a dominant position contrary to TEC Art. 82 as interpreted in *Bronner* – refusal to supply an essential product, elimination of a downstream market and no objective justification for the refusal.

However there is one condition that the Commission seems to have overlooked, or at least insufficiently examined, in its analysis, which is that the refusal in question must concern a product that is indispensable for the production of a new product for which there is an unsatisfied consumer demand. Hence, unless it could be shown that the interoperability information requested by Microsoft's competitors is not protected by intellectual property rights, it seems clear that this condition should be met to justify the application of Art. 82.

The Commission's decision contains limited references to the impact of the refusal on the ability of Microsoft's competitors to develop new products. Due to the inability of competing server OSs to interoperate with the Windows OS, an increasing number of consumers were deemed as locked into choosing Windows server OS as well. This impaired their ability to benefit from innovative OS features brought to the market by Microsoft's competitors. These competitors are on their turn discouraged from developing new products. In a longer term perspective, if the firm's strategy was successful new rival products would be confined to novelty existences, if they succeeded in entering the market in the first place. The scope for innovation would be limited to innovation coming from the Microsoft itself. Id., ¶¶ 694 & 700.

This analysis fails to meet the Magill test for it does not meet the "new product" element. In that case, a specific new product would have to be identified, the production of which would have been made impossible by the dominant firm's refusal to supply information. In Microsoft, the Commission simply suggested that the firm's refusal to disclose interoperability would prevent its competitors from developing unspecified future new products.

In sum, as in US antitrust law, there does not seem to be a solid "essential facilities" doctrine formally recognised by the ECJ. The Court has, however, admitted that, in some limited circumstances, a dominant firm's refusal to supply essential products or services to a competitor on a downstream market may result in competition elimination; in this case, this refusal constitutes an abuse of a dominant position contrary to TEC Art. 82.

Tying

After abundant informational feed-back from the market -end-users, SMEs actives in the IT industry and competitors - the Commission started investigations on a possible illegal tying of WMP to the Windows OS. Under EC competition law three cumulative elements construe illicit tie-in sales: (a) dominant position in one market, (b) the bundle of two separate products and (c) market foreclosure.

Commission found that Microsoft accounted for approximately 94% of the OS market and the first element was thus deemed met. The existence of distinct products is the second element. The firm opposed the Commission's findings by arguing that (a) WMP is an integral part of

Windows and not a distinct product and (b) that since there is "no material demand for operating systems without media player technologies". Microsoft, ¶ 809

The separate product/consumer demand test employed by the Commission suggested otherwise though. The fact that the market offered media players separately was evidence of consumer demand for media players distinguishable from the demand for PC OSs. There was, therefore, a separate market for these products. There is also separate supply since ISVs developed media players on a stand-alone basis. What is more, media players are often offered for download from the respective vendors' websites. Microsoft's practice to develop and distribute versions of WMP for Apple's Mac OS and Sun's Solaris OS indicated that OSs and media players are not parts of a single product. The firm releases upgrades of WMP too, distinct from Windows OS releases or upgrades.

Microsoft further argued that the direct consumer demand test under a per se rule "focuses on historic consumer behaviour, likely before integration" and therefore risked ignoring efficiency benefits deriving from new product integration. Microsoft, ¶ 808. In the case of WMP, however, a significant number of consumers chose to obtain media players separately from their OS, a fact that indicates that informed consumers recognize them as separate products.

The position that "few consumer[s] would take Windows without WMP when offered a choice of Windows with and without WMP" as they would likewise obtain "operating systems that could not play music CDs or play music files downloaded from the web", Microsoft, ¶ 809, disregarded the alternatives that would be available to customers if Microsoft did not bundle WMP with Windows. If OEMs and consumers had the possibility to obtain Windows without WMP that would not mcessarily mean that they would indeed choose to obtain Windows without a media player. OEMs are likely to follow consumer demand for a pre-install media player and offer a package which would include a media player on top of Windows. The difference would be that the media player would not automatically be, although it could be, WMP.

The third element of illegal tying pursuant to Art. 82 is market foreclosure and its is two-sided: on the one side consumer appeal is harmed as customers are deprived of the choice of buying the tying product without the tied product, while on the other side competition is injured as the effective ability of the rivals to compete is compromised.

By virtue of Microsoft's licensing model, OEMs had to license Windows with the WMP pre-installed. Microsoft did not offer the OS licence without the WMP. OEMs, who chose to install an alternative media player on Windows, could only do so in addition to WMP. This happened for the media player was physically and technologically integrated into the OS. This equaled to no available means through which WMP could be unistalled. Microsoft supported this business choice by arguing that it did so to take advantage of the capabilities that the player provided.

If WMP were removed, other parts of the operating system and third party products that rely on WMP would crash.

At the same time and for the above-mentioned reason the firm objected the applicability of TEC Art. 82(d) pointing to the fact that customers could get WMP for free -the bundle was licensed at no extra charge- and that notwithstanding the bundle, users were indeed free to download and use any media player they wanted. As a matter of law this argumentation is void; the wording of paragraph (d) of Art. 82 does not include a reference to paying when introducing the element of a "supplemental obligation". If Microsoft was to be correct Art. 82 prohibition would only apply to cases, where customers would have to buy something extra. Antitrust regulators are not central planners; the prophylactic character of antitrust legislation requires the law to strike down situations that undermine the maintenance or growth of existing competition -Hoffman-LaRoche- and not to control pricing strategies.

The second flaw of the firms argumentation lies in its belief that there had to be coercion in support of abuse. There is nothing in the letter of Art. 82 suggesting that either. In Hilti users were not forced to use the branded nails they obtained with the branded nail gun. Bermann (2002), 857. It was the foreclosure of competition due to the shift of consumers of ISVs to the bundled product that injured competition and not the alleged coercion to purchase or use WMP. As long as consumers obtain WMP along with the OS -even if for free- rivals are by definition at a competitive disadvantage. This was because no other media player vendor, apart from Microsoft itself, could guarantee that its proper media player would be as ubiquitous as the Windows OS was. Content providers and software developers who know that WMP was present on all Windows more than 90% of the market would provide Microsoft with a competitive advantage by developing content and applications primarily for WMP.

As afore-mentioned, an Art. 82 interpretation as comprising an element of coercion is incompatible with the EC acquis on the matter. EC law should be interpreted instead not only from wording but also from the objectives of the rules of which it is part; TEC Art. 82 must thus be read in the light of its underlying objective which is to ensure that competition in the internal market is not distorted - TEC Art. 3(g): tying is prohibited irrespective of whether its effects are direct or indirect.

It follows that the sale of WMP conditioned on the sale of the Windows OS is actionable since it ties users through the maintenance of high application barriers to entry in the software market. What is more it has spill-over effects on competition in related products such as media encoding and management software, but also in PC OSs for which media players compatible with quality content are an important application. Microsoft's tying practice created a serious risk of foreclosing competition and stifling innovation.

Microsoft offered general excuses for its practices. The firm attempted to show efficiencies from the bundle, which allegedly outweighed any possible anticompetitive effects, namely efficiencies related to distribution, web content and applications in general.

Claims regarding the efficiencies of tying in terms of lowered transaction costs for consumers failed to differentiate between the benefit to consumers from having a media player pre-installed along with the PC OS and Microsoft selecting the media player for consumers - Hilti.

Software bundles are a common place in the IT industry; OEMs customise their PCs in terms of hardware and software in order to differentiate them from competing products and to meet specific consumer demand. Consumers choose bundles of PC OS and media players offered by OEMs according to their preferences and do away with the time and money-consuming process of assembling them themselves. Nothing about sale synergies required the pre-installation to be undertaken by Microsoft, let alone through Microsoft's exclusive and irreversible bundling of WMP with Windows.

Microsoft contended that the tied sale of two products saved resources otherwise spent for maintaining a separate distribution system for the second product. These economies would then be passed on to consumers who could save costs related to a second purchasing act, including the selection and installation of the product. Irrespective of the accuracy of this assumption that distributive efficiency gains were to be necessarily passed on to consumers, such savings could not possibly outweigh the distortion of competition. This is because distribution costs in software licensing are insignificant; a copy of a software programme can be duplicated and distributed at no substantial effort. In contrast, the importance of consumer choice and innovation regarding applications such as media players is high.

Microsoft further stated that it should not be set at a competitive disadvantage compared to most of the other operating system vendors who all provided multimedia capabilities with their operating system offerings. First, the Commission's decision did not purport to prevent Microsoft from entering into arrangements with OEMs to pre-install Windows or a media player on a PC in order to meet the corresponding consumer demand. Indeed, OEMs acted as purchasing agents for consumers in providing such bundles. What was abusive was that Microsoft imposed its media player through tying.

Second, comparing its conduct to that of other players in the client PC OS market, Microsoft disregarded the different impact stemming from tying practices engaged in by a dominant company and by non-dominant players. A dominant company may be deprived of the right to adopt a course of conduct which is unobjectionable if adopted by non dominant undertak-

^{*} TetraPak, Case T-83/91, 1994, ECR II-755 ¶ 137.

ings. The ECJ has also held that even if tied sales of two products are in accordance with commercial usage, such sales, if entered into by a dominant company, may constitute abuse within the meaning of Art. 82, unless they are objectively justified*. While a non-dominant PC OS producer, who chooses to integrate may control innovation relating to the features on its platform, competitive innovation in the market is still possible because new features may bedeveloped in conjunction with competing platforms. This is not the case where the platform market is virtually monopolised. Tying will deter innovation in the whole market to which the integrated product belongs.

Microsoft did not submit substantiated evidence that showed the integration of Windows and WMP codes would lead to superior technical product performance. It argued instead that software developers wanted to be able to place calls to WMP APIs. "If the client PC operating system on which developers write an application makes available media APIs, developers do not have to 're-invent the wheel' each time they want to implement a functionality". Microsoft, ¶ 962. They are able to focus on their areas of expertise and commercial interest, the content and quality of their programmes. Consequently, the value of the operating system package for end-users is increased. There are efficiencies of media player integration, which outweigh any possible anticompetitive effects, and therefore WMP and the PC OS have to be regarded as one product rather than two.

Through tying WMP with Windows, Microsoft used Windows as a distribution channel to ensure significant competition advantage in the media player market for itself at the expense of competition. Competitors due to Microsoft's tying, were a priori at a disadvantage, irrespective of whether their products were potentially more attractive on the merits.

This was why Microsoft interfered with the normal competitive process, which could benefit users in terms of innovation thanks to unfettered competition on the merits. Tying of WMP increased the content and applications barrier to entry, which protected Windows and facilitated the erection of such a barrier for WMP. A position of market strength achieved in a market characterised by network effects, such as the media player market, is sustainable, since the network effects work in favour of a company that has gained a decisive momentum.

Remedy

Following the upholding of the Commission's decision by the CFI in June 2005, Microsoft was obliged to capitulate, fulfill its obligations and provide the remedy requested. Per the decision a Monitoring Trustee would assist the Commission in the monitoring of Microsoft's compliance.

"[T]he Trustee should not only be reactive, but should play a proactive role in the monitoring of

Microsoft's compliance". Microsoft, ¶1045. Articles 3(1)(d) and 5(6) made further clear that the Trustee, under the supervision of the Commission, had to monitor Microsoft's compliance on his own initiative. In order to fulfill that proactive role and to form its own, impartial, view on complex technical questions, the Trustee had to be in a position to gather views on compliance issues through contacts not only with Microsoft engineers, but also with potential beneficiaries of the remedy. Microsoft, ¶¶ 1044-48.

The trustee decision also sets out certain of the rights and obligations of Microsoft towards the Trustee and of the Trustee towards Microsoft and third parties. For example, Microsoft was obliged to provide the trustee with access to information and Microsoft staff necessary to monitor Microsoft's compliance with the March 2004 Decision. In addition, art. 5(2) of the trustee decision provided that the Trustee and his Advisors shall not make any public statements relating to their functions.

Five months later, was still found not complying with its obligations to: (i) supply complete and accurate interoperability information and (ii) make that information available on reasonable terms. In response, the Commission issued a decision per art. 24(1) of Council Regulation 1/2003 threatening the firm with penalties of up to € 2 million per day.*

Microsoft complied and revised the interoperability information that it was obliged to disclose. However, it was the Monitoring Trustee this time, who was of a different opinion The relevant documentation was sommunicated to the firm, which requested an oran hearing to be held so as to present its case. The hearing concluded that Microsoft had still not complied with its obligations, something that entailed the imposition of a penalty payment of \in 280.5 million for non-compliance – \in 1.5 million per day from 16 December 2005 to 20 June 2006.

^{*} The article reads: "The Commission may, by decision, impose on undertakings or associations of undertakings periodic penalty payments not exceeding 5 % of the average daily turnover in the preceding business year per day and calculated from the date appointed by the decision, in order to compel them: (a) to put an end to an infringement of Article 81 or Article 82 of the Treaty, in accordance with a decision taken pursuant to Article 7; (b) to comply with a decision ordering interim measures taken pursuant to Article 8; (c) to comply with a commitment made binding by a decision pursuant to Article 9; (d) to supply complete and correct information which it has requested by decision taken pursuant to Article 17 or Article 18(3); (e) to submit to an inspection which it has ordered by decision taken pursuant to Article 20(4)."

^{**} The article reads: "Where the undertakings or associations of undertakings have satisfied the obligation which the periodic penalty payment was intended to enforce, the Commission may fix the definitive amount of the periodic penalty payment at a figure lower than that which would arise under the original decision. Article 23(4) shall apply correspondingly."

On March 2007 the Commission, by means of a statement of objections, warned Microsoft of further penalties of up to \in 3 milion per day over its unreasonable pricing of the interoperability information. A year later on February 2008, the Commission adopted a decision pursuant to art. 24(2) of Council Regulation 1/2003, imposing on Microsoft a penalty payment of \in 899 million for not complying with its obligations.** *Implementation of the Decision*.

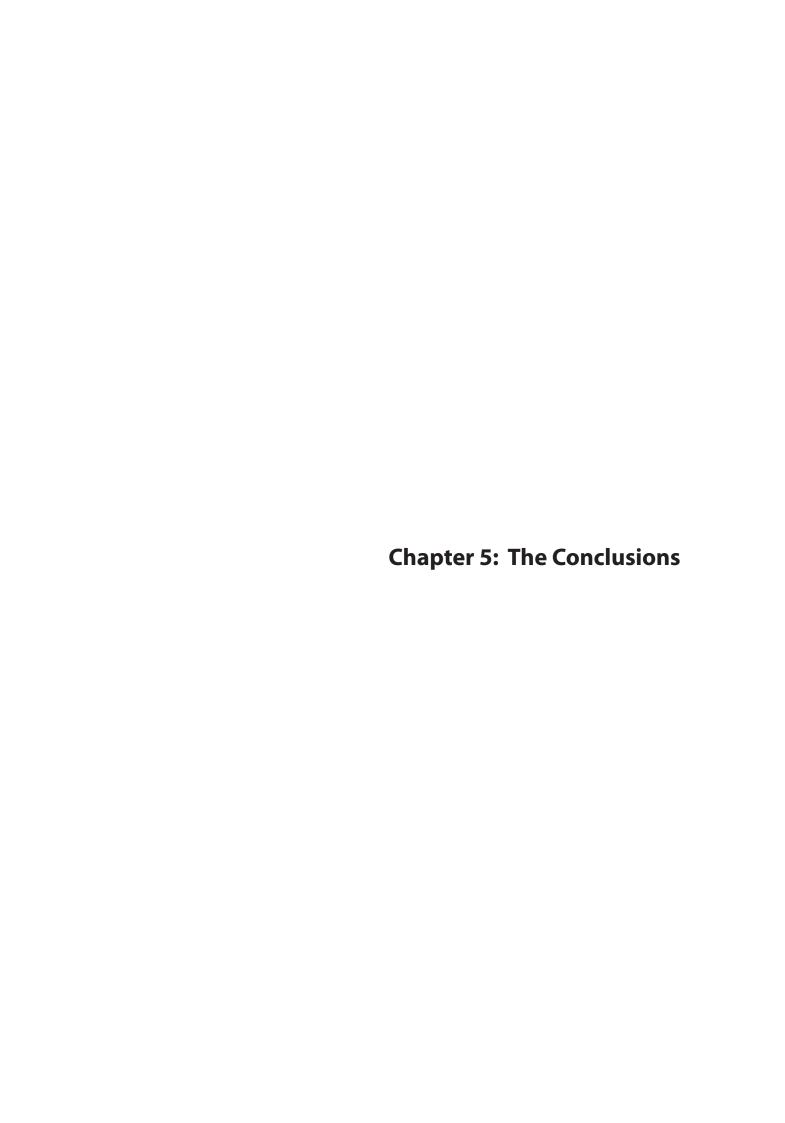
D. THE GAME GOES ON...

In the meantime, two new fronts broke out with the Commission. The first front was opened by Opera, a Norwegian ISV, which petitioned Brussels to examine the bundle of IE to the Windows OS. New Case for Microsoft (Dec. 2007). The second was opened on the initiative of the Commission itself; two new investigations were launched against Microsoft, which is suspected of abusing its dominant position by tying a range of software to its dominant Windows OS and refusing to make its products interoperable with those of rivals.

The bundles integrate IE, Windows Desktop and Windows Live. We know the first case from the US litigations; things are not expected to take any different route. As to the rest EC antitrust authorities, let alone their integration to its OS, are questioning the development of programmes that search the desktop and the web at the same time. The interoperability disclosures deal with the omnipresent Office Suite, several server products and .Net – a programming language rival to Sun's Java.

Microsoft is suspected of acting in an anti-competitive manner by retaining information about its most frequently used software suite, which contains applications, such as Word, Excel, Power Point and Access. This makes them incompatible with other products, for whom such actions can be devastating due to Microsoft's dominant position. What is more, the software, which allows the use of common programmes, such as Microsoft Outlook webmailing, runs on external software contained in remote servers. The Commission will investigate the interoperability capabilities of these programmes. The investigation will additionally try to verify if the .Net code is made in a way that prevents competitors from developing their own languages freely.

Microsoft said it "will fully cooperate with the investigation of the European Commission". New Probe Against Microsoft (Jan. 2008). That remains to be seen...



The cases brought against Microsoft in both the US and the EC are possibly the stances that prove more adequately Robert Bork's contention that "[antitrust is] a policy at war with itself". The consistence of the holdings with the legal rules themselves or their underlying assumptions is highly debatable. Our conclusions are structured under the form of a three-level critique: on the law, on the procedure and on the policy levels. After that, we shall conclude with two general policy positions.

The law affords to abuse of dominance is the rule-of-reason review. In order to construe the anticompetitive behaviour of a market leader, the competent antitrust regulator has to fully assess the position of the dominant firm. This is done through the adequate definition of the relevant market – either product or geographic. The market is used as the general framework for the measurement of the power of the dominant firm in it. A false market definition precludes false market shares and can consequently lead to erroneous estimations of market power. The regulator can then jump into either Type I or II errors.

An assessment of the technicalities of the method the US courts and the European Commission used in order to calculate Microsoft's share in the PC OS market fall without the scope of the present paper. We focus instead on the correctness of the finding with regard to the nature of the market. The relevant product market was defined as "Intel-compatible PCs". This market definition was valid until recently and all assessments of Microsoft's conduct were premised thereon. However, insistence on such a finding in a highly volatile industry like the IT sector is, offers no good service to antitrust regulation. Recent technological developments, largely based upon the cooperation antitrust laws tend to strike down, made Intel's CPUs compatible with OSs other than Windows. Although this development hasn't yet touched on APIs –for instance, applications designed for the Windows OS still cannot run on the Mac OS– it may signal that the phrase "Intel-compatible PCs" could soon become obsolete.

Of course, we do not contend that Microsoft be allowed to re-engage in the conduct found to be violative of competition legislation; an assessment of its obligations may well suffice. Going back to the discussion on barriers to entry, exit from and entry in a market happen at the same ratio. So when dealing with a market, whose sole high barrier to original entry is the up-front possession of the adequate amount of capital to allow for the development of a new piece of software, this argument sounds quite amplified. All the above imply a need for current monitoring but this will be dealt with below.

The righteousness of the way regulators applied the competition law provisions is debated too. The arguments made by the DC District Court, roughly premised on the conclusory statements that the actual engagement of the firm in the conduct under review proved their feasi-

bility and the firm's monopolising intent at the same time, were rejected by the appellate court. The same happened with the Commission's argumentation.

But how determinative in a dominance case the intent to monopolise should be? Economists assume that rational individuals intend the natural and predictable consequences of their actions. Antitrust law proceeds largely on the same assumption: economic actors are ordinarily deemed to intend the foreseeable results of their acts. Well, this may be true for personal businesses; the foreclosure ability however of which is non-existent. Can this assumption be true for corporations as well? The law may have come up with the fictitious legal personalities but, is its ability to put intention down to legal persons unlimited? As a matter of law philosophy, the answer to that question does not fall under our questions here presented.

What can we argue on the other hand is that the subjective "intent" test can be substituted by an objective one. Judge Easterbrook and Robert Bork contend that predation is a risky route of business. If however a firm is willing to play the game, it puts itself against the possibilities. Price race-to-the-bottom, below-cost pricing and other equivalent devices do nothing else but erode established market positions. The barriers to entry, to the extent they exist, go lower and entry is facilitated. Albeit regulators need not wait until the policy eventually pays off, they are in a position to assess, given the case-by-case market factors, the feasibility of any predatory policy in the long run. Of course this requires expert input, which is expensive and administrative bodies have better access to than courts do. The examination of the IT market trends can be the object of a separate research. What can instead be examined here is the existence of harm either to competition or consumers and this question is very context related.

IT consumers can be roughly put into two distinct categories; sophisticated users and non-sophisticated users. The first group, which lags behind the second in numbers, can cut around many ways the marketing policies imposed by OEMs or ISVs. The development of the internet in both latitude and depth gives this group access to resources that can provide reliable alternatives to what, say, Microsoft offers. Sophisticated users can build up their computer on their own or even configure it in the way that fits their needs the most. Their ability or even their preference to pieces of software other than the pre-installed should not be underestimated.

If on the contrary, the focus is placed on the non-sophisticated users, then the above mentioned skills should be foregone but there should also be a reassessment of the choice foreclosure effect. How much worse off a computer starter can be if he or she gets IE bundled to Windows at no extra charge? Microsoft argued in that direction but the European Commission assessed it in a wrong context and dismissed it.

A law-enforcement of that kind takes its toll on the policy objectives as well. Public choice the-

ory issues arise and the regulators may well be charged of protecting competitors rather than competition.

The question of mandatory access is closely interconnected with the tension between ex ante and ex post efficiency. Mandating a dominant firm in possession of an essential facility to share it with one or several competitors will stimulate competition in downstream markets, thus promoting ex post (allocative) efficiency. At the same time, mandatory sharing may reduce the return on investment and decrease significantly incentives to invest - ex ante (dynamic) efficiency. Damien Geradin suggests that the ECJ has traditionally focused on ex post efficiencies. He argues that the reason is that allocative efficiency gains are generally easier to measure than dynamic efficiency gains; some of those short-term gains can be falling prices or even improved quality of service. Geradin (Dec. 2005), 19. The public choice argument here is obvious; antitrust policy focuses primarily on gains that can be easily assessed by the consumers/voters rather than on the consumers long-run welfare that might be maximised by the real opening of a market. Incentives for investment may well tear down the network effects, which regulators in the Microsoft litigations so eagerly argued against.

This approach may be also explained by structuralist views, which transcend the EC approach of antitrust law. OECD (2005), 253. This is explained by the fact that apart from the protection of free-enterprise, EC competition rules aim additionally at the creation of an integrated single European market. In general terms however, these views advocate that "there can be no competition without competitors". Id. The tension with more consumer-welfare-approaches is obvious; they cannot be served both and we will refrain from arguing in favour of the one against the other. After all, it's a political choice.

What we can say is that until these structuralist approaches are expressly endorsed over the consumer welfare ones, EC Competition law should be deemed to depart from the modern antitrust law perspective, which put any conduct in question on the consumer welfare scale: consumers are better or worse off? We focus more on EC at the present stance for it was the European Community agencies that imposed on Microsoft severe compulsory dealing obligations. The US Courts did the same but in a way that didn't compromise the protection of the intellectual property of the firm – in any case, the US are deemed more keen on IPR protection than the EC.

Compulsory dealing opens two more questions. The first refers to what the regulator has to do after it dictates disclosure and the second to the overall consistency of such an antitrust regulatory framework with the dominant economic paradigm. It is clear that compulsory dealing or licensing entails the cooperation of the competitive fringe with the dominant firm in order to define the terms of access; these include prices and conditions, which shall be reviewed by the regulator so as to make sure that they actually do provide access in a non-discriminatory way.

This activity, which resembles to central planning, is not a task that a court is able to undertake. We can argue that it is not for an administrative agency either. On the contrary, the facts we reviewed for the Microsoft litigations offered an excellent example of market self-regulation. The market itself managed, or at least tried, to overcome the applications barriers to entry through the development of middleware. What we argue so is that the Commission could give incentives for middleware developers to carry on investing so as to be able to compete on the merits with Microsoft, rather than making Microsoft give away the fruits of its own investments.

All the above seem to suggest that the invisible hand of the market is not free to act, if it acts at all. It is in a constant *bras-de-fer* with the hand of the antitrust regulators. And we do not say that this is generally bad or undesirable but it is certainly not consistent with the implied economic policy objectives of the free market economies.

We instead propose that the real solution to oligopolistic markets is to give incentives to current or future economic actors to engage in and invest on activities that will erode the established positions, which haunt markets. Otherwise, it will be true that "[E]ven though modern economics embodies an 'efficiency' rationale for the [antitrust law], that rationale [has never been used] to make a case for the original enactment of the law. Rather, it was constructed, ex post, as a rationalization for a law that already existed. Moreover, it appears that the efficiency rationale for antitrust has often been used by legislators as a justification for protectionist policies" DiLorenzo (1985), 87...

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