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The Role of Economic Efficiency in Competition Law

by

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CONTENTS

Abstract

The main focus of the paper is the function of economics in the current application of competition law. While advocating further economization of the law, it is seen as necessary to widen the extent to which aspects of economic efficiency encompassing static and dynamic efficiency are taken into consideration in an antitrust analysis. Much attention is devoted to these issues, while clarifying what is meant by them, how they are to be understood and implemented in the practice of antitrust authorities, as well as discussing their importance for the promotion of innovation. It is noted that accounting for the economic efficiency aspects differently in the light of competition law allows for the assessment of the market behavior of dominant companies, which traditionally has been seen as anticompetitive. This main issue of the paper is analyzed extensively and explained using the case of Microsoft, a company accused by the US and EU antitrust authorities of abusing its dominant position on the market of operating systems in that it integrated the sale of its base product Windows OS exclusively with other applications (Media

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Player and Internet Explorer). The differences presented in the research part of the paper as to the way Microsoft was treated by these authorities originated in their different methodology of analysis and assessment of the effects of the sales model launched by Microsoft for products offered to the PC manufacturers and their users, in spite of the US and EU antitrust authorities adopting the same evaluation standard – consumer welfare. Aspects of dynamic efficiency adequate in the assessment of the behavior of innovative firms holding a dominant position proved to be deciding. On the other side of the Atlantic, taking into account the aspects of dynamic efficiency was crucial in coming up with a lighter assessment of Microsoft's tying compared to the European authorities' assessment which was based largely on the structural analysis, where the benefits arising from dynamic efficiency are not visible. It is clear from the decisions made by the Commission that it favours regulation over effects generated by competition forces at a later time.

Resumé

L'objet principal du papier est la fonction de l'économie dans l'application actuelle du droit de la concurrence. Tout en préconisant une plus loin économisation de la loi, il est jugé nécessaire d'élargir la mesure dans laquelle les aspects de l'efficacité économique englobant l'efficacité statique et dynamique sont pris en compte dans une analyse antitrust. Une grande attention est accordée à ces questions, tout en clarifiant ce qu'on entend par elles, comment elles doivent être comprises et mises en œuvre dans la pratique des autorités de la concurrence, et en abordant leur importance pour la promotion de l'innovation. Il est noté que la prise en compte différente des aspects d'efficacité économique à la lumière du droit de la concurrence permet d'évaluer le comportement des entreprises dominantes sur le marché, traditionnellement considéré comme anticoncurrentiel. Cette question principale du papier est analysée largement et expliquée en utilisant l'affaire de Microsoft, une société accusée par les autorités de la concurrence des États-Unis et de l'UE d'abuser de sa position dominante sur le marché des systèmes d'exploitation en intégrant la vente de son produit de base Windows OS exclusivement avec d'autres applications (Media Player et Internet Explorer). Les différences présentées dans la partie de recherche du papier sur la façon dont Microsoft a été traité par ces autorités provenaient de leur méthodologie différente d'analyse et d'évaluation des effets du modèle commercial lancé par Microsoft pour les produits offerts aux fabricants de PC et à leurs utilisateurs, malgré L'adoption par les autorités de la concurrence des États-Unis et de l'UE de la même norme d'évaluation – le bien-être des consommateurs. Les aspects d'efficacité dynamique adéquats dans l'évaluation du comportement des entreprises innovantes occupant une position dominante se sont avérés décisifs. De l'autre côté de l'Atlantique, la prise en compte des aspects d'efficacité dynamique a été déterminante pour une évaluation plus légère de la vente liée de Microsoft par rapport à l'évaluation des autorités européennes fondée en grande partie sur l'analyse structurelle où les avantages l'efficacité ne sont pas visibles. Il ressort clairement des décisions prises

par la Commission qu'elle privilégie la réglementation sur les effets générés par les forces de la concurrence à un stade ultérieur.

Key words: dynamic efficiency; economic efficiency; efficient competition; innovations; static efficiency; tying.

JEL: K21, L40, L41

I. Introduction

An important issue in the application of competition law is to ensure coherence between the goal for which the law has been established and the practice of its enforcement. Competition law written in a simplified language of economics, containing abstract hypotheses on prohibited antitrust practices, affords competition authorities a great deal of scope for interpretation in terms of its application when declaring certain behavior of enterprises as unlawful. This creates a great potential for administrative discretion of antitrust bodies with the risk of flawed assessment of antitrust cases. The progressing economization of competition law certainly limits this subjectivity and arbitrariness and thereby the number of erroneous administrative decisions and court judgments. However, some claim that there is too much economics in competition law and that it has its limitations when it comes to solving antitrust cases, with some even claiming that economics unnecessarily complicates these cases. Lawyers are not the only ones to believe that the competition law economics should be simplified, reduced to a few simple economic models of market power, barriers to entry, market share, monopolistic prices, monopoly agreements, 'evil' monopoly or the abstract model of free competition which solves all consumers' problems. Nothing could be more wrong and harmful for competition policy than this kind of a simplified version of effective and efficient market and theory of economics. There is no turning back from the economization of competition law. In my view, it is crucial to consolidate the application of competition law into a single framework and into the principles of economic analysis which is strictly underpinned by the same criterion – consumer welfare -- the sole aim of competition policy. Competition law is an operational and ruling instrument of competition policy. This is possible when the sole criterion in the application of competition law and assessment of entrepreneurs' market behaviors is economic efficiency. How the role of economic efficiency is to be understood and perceived in terms of settling antitrust cases is the main objective of the considerations presented in this

paper. The discussions on the role of economic efficiency in competition law encompass not only issues relating to static efficiency (productive and allocative), since they also show how and when antitrust cases should take into account dynamic efficiency. In an antitrust analysis, aspects of dynamic efficiency become indispensible when they refer to innovative branches and hyper-competitive markets. The empirical part of the paper shows how the USA and EU differ in terms of their antitrust decision-making practice, with those differences being the result of the varying degree to which aspects of dynamic efficiency are included within the framework of their antitrust analysis. These differences will be demonstrated on the example of tying, a market practice used by Microsoft.

II. Economic efficiency vs. economization of competition law

Elevating the criterion of economic efficiency to the basic standard of the enforcement of competition law results from the new model of conducting competition policy based on competition law as proposed by economists and lawyers from the University of Chicago, in literature known as the Chicago School of Economics. Instead of the protection of competitors and competition, it was economic efficiency that came to the fore as the result of the School's argument that consumer welfare is the overriding goal of the application of competition law by competition authorities. Neoclassical microeconomics provides the theoretical basis for the Chicago School, also referred to as price theory. The school's representatives, however, relied on the efficiency elements of this theory contained in its fundamental concept of consumer welfare. In making this step, the Chicago School defined a practical imperative for the competition law practitioners in that the basis for the assessment of enterprises' prohibited market practices was an economic analysis underpinned by the logic of productive and allocative efficiency, since productive and allocative efficiency make up the content of the consumer welfare standard. The analysis of antitrust cases within the framework of this concept introduces just one criterion and, unlike Harvard School and ordoliberal economics (Jurczyk, 2012, pp. 67–105), finds references to socio-political criteria, structural aspects of the market and the protection of small enterprises to be erroneous. Thus, including the standard of consumer welfare in the practices of antitrust authorities was a breakthrough leading to a far-reaching economization of competition law. What is further important is that this view was accepted on both sides of the Atlantic. Although, as we will see later, the European Commission has failed to be consistent in this respect,

still placing significant importance on the market structure and the dispersion of enterprises' market power.

Economization should be understood as the application of economic methods and tools in order to examine market processes, economic factors and phenomena which are subject of the provisions of competition law. Economization is comprised of two blocks of economic tools, methods and models. The first block is made up of quantitative and qualitative economic methods and models suitable for use in antitrust proceedings, mostly showing characteristics of the relevant market, economic performance of the market and competitors, pricing behaviors, pricing simulations, market changes and effects associated with anticompetitive practices, correlations between market data crucial in the assessment of a particular practice, simulations of data making a monopolized market similar to competitive market, price analyses, analyses of purchasers' behaviors, as well as surveys and statistical extrapolation of data.

The second block of economization includes economic theories and models embedded in microeconomics, explaining (or making it plausible) which market practices defined by competition law as anticompetitive are yet not so from the point of view of economics. Market behaviors will thus not be seen as anticompetitive practices when they are distinguished by economic efficiency, innovation and consumer-oriented effects, even though there is a great market power behind them.

The economization of competition law effected by these two ways has actually been accepted both in the United States and European Union by having agreed that the overriding standard in the enforcement of competition law should be only consumer welfare.

The standard of consumer welfare brings to the fore the obligation to assess market behaviors of enterprises in terms of economic efficiency equated with productive and allocative efficiency. This requires that antitrust authorities provide relevant evidence. In order to verify correctly (from the point of view of consumer welfare) a particular practice described by competition law, antitrust authorities have to collect numerous pieces of economic evidence and carry out an in-depth and detailed analysis. R.H. Bork, a prominent representative of the Chicago School, argues that price theory forms the proper theoretical and methodological basis for this analysis of antitrust cases, or those pertaining to unilateral and agreed practices as well as concentration processes. Moreover, he stresses that the threat to competition are only those situations which cause prices to increase above the level that is appropriate for the competitive market. Only under such circumstances do we encounter serious market distortions leading to allocative inefficiency (Bork, 1993, p. IX).

In some proceedings, especially while considering vertical agreements and concentration notifications, the theory of transaction costs and behavioral economics can be of use. For reasons of fairness, it should be stated that economics has its epistemological limits when it comes to clarification of antitrust cases. The epistemological limits of economics become particularly apparent when there is a need to assess a short and long-term impact of a particular market behavior when its effects are opposing one another (Devlin and Jacobs, 2009, p. 256).

Microeconomics and quantitative analyses do not always provide unambiguous and coherent answers. Lawyers, therefore, argue that the influence economics exerts on competition law should not be extended and should not be of key importance. As mentioned before, economics is indeed not always able to clarify antitrust disputes with certainty, but does it have to mean that the exegesis of the competition law making no references to economics will provide better and less unambiguous results? The only thing that is certain is that in applying a simplified or intuitive interpretation of economic phenomena prohibited by competition law, antitrust authorities eschew arduous and multi-stage hearing of evidence and analyses, and consequently longer and more costly proceedings, too. This approach, however, entails a risk of committing more mistakes than when the decisions are based on economic considerations, even if these fail to be unambiguous. Also, since economic arguments are less important, being replaced by abstract legal hypotheses, defendants lose their chance of effective defense. The history of antitrust laws shows a considerable number of such cases.

Nor can one support the view that since conducting antitrust cases is in the lawyers' hands, economic analyses and considerations should be uncomplicated and easy to understand (Szymczak and Szadkowski, 2016, p. 155 and 156), in other words, simplified. Competition law is not the only law discipline where those conducting proceedings must refer to complex, expert knowledge of a variety of disciplines, such as, for example, penal and fiscal proceedings, administrative (tax) or civil proceedings of economic nature. What is important, antitrust authorities employ not only lawyers, but also numerous economists. Further to that, as economization of competition law has been progressing, a position of chief economist with considerable competences was established within antitrust authorities. This is not about making a fetish of economics in competition law (Sroczyński, 2016, p. 106–107), yet the fact remains that including more economics in competition law, marked by consumer welfare standard, provides a better chance of weighing up the positive effects against the negative ones of antitrust cases in question, even when accounting for some epistemological limits. Competition law uses economic terms. Applying more economics while explaining those terms in reference to specific market

practices which this law prohibits is therefore perfectly rational. Thanks to the economic analysis, the framework and methods of an antitrust analysis are made more real by providing substantial, logical and coherent economic and business facts. It is the explanation of all significant circumstances that is important and not the complexity of economic analyses. The conclusions made regarding antitrust cases should correspond to the reality in terms of the market effects assessed according to the consumer welfare criterion, and not solely to abstract legal reasons arising from the laws. Competition law does not use its own terms within the scope of substantive law and has not established its own language, nor are these terms appropriate for civil and administrative law. In competition laws we encounter terms created and explained by economic sciences. Thus, economics forms a natural base for the clarification of antitrust cases. Replacing economic analyses with simplified schemes of business market behaviors, tacit knowledge, sociological, psychological knowledge or even behavioral economics (Sroczyński, 2016, p. 145), where rationalism and economic efficiency take second place, involves running the risk by antitrust authorities of making erroneous decisions which are contradictory to market logic and the logic of business management, whose underlying basis is effectiveness and rationality. Other social sciences cannot be a substitute for the economic methods accepted in an antitrust analysis. They can merely play a complementary function. That economic analysis is providing increasingly better answers to questions posed by competition law is noticeable (Devlin and Jacobs, 2010, p. 253–262). This is attested by the changes the analysis brought to the evaluation of such unilateral practices as: bundling and tying, predatory prices, excessively high prices, closing access to essential facilities, refusal to sell which stopped being absolutely prohibited practices when holding a dominant position. Economization has also changed profoundly the classification of vertical agreements, mainly the functioning of distribution networks which, for all practical purposes, with the exception of minimum resale price, have been freed from the clauses which were prohibited earlier. In cartel law, economics of oligopolistic markets and game theory fulfill useful functions in their detection (Jurczyk, 2016a, pp. 350–359). Similar changes occurred in the analysis of concentration processes. The dominant criterion of assessment became economic efficiency resulting from the economies of scale and scope, synergy, reduction of transaction costs, innovation, and not market structure and share after the conclusion of a concentration transaction. The register of prohibited market practices has been considerably reduced over the last three decades owing to the economization of competition law. Also, economization made it necessary for antitrust authorities to replace in their work the useful rule of per se prohibition with a more demanding rule of reason (Jurczyk, 2016b, p. 249).

III. Consumer welfare vs. static and dynamic efficiency

Adopting the standard of consumer welfare signifies that antitrust authorities will be directed towards issues within the scope of allocative and productive efficiency, while maintaining a proper balance between them when under the circumstances of a particular antitrust case the effects are opposite, e.g. they can increase productive efficiency in concentration processes, yet worsen allocative efficiency. Allocative efficiency and productive efficiency are part of static efficiency. Static efficiency means optimal production and distribution of limited resources. Its objective is to lead a system (entity) towards reaching the production possibility curve (assuming it is known at a given time). The static approach to economic efficiency is the focal point of neoclassical economics and it is related to the concept of 'general equilibrium', that is a state in which markets are cleared by all individual economic entities at the prices which fulfill the objective function, which is the maximization of profit and usefulness (Kozuń-Cieślak, 2013, pp. 16–19).

Static efficiency occurs under the conditions of a perfect competition, which is a competition model that is purely theoretical. It can, however, be linked to monopolistic and imperfect competition, the models which are closer to reality. In the terminology of competition policy, these models can be associated with free competition. These are structural models of market competition, where there are no barriers to entry, companies compete in prices and quality, with none having considerable market power. Such a market consists of small and numerous undertakings having a sound knowledge of its parameters. Although they may for awhile gain economic power over purchasers and raise prices above the competitive level and thus gain a windfall, this is temporary. The increase in prices is the incentive for new players to enter the market, which makes the windfall soon disappear. Thus, only the static efficiency processes can take place under the conditions of free competition.

And so, under the conditions of free competition, productive efficiency (X-efficiency) materializes, in the first place, in the reduction of production costs through optimization of costs and production size, which is linked to a more effective use of material and non-material resources in technological processes. This kind of efficiency is also called technical efficiency, allowing allocative efficiency to be achieved in the production sphere. In other words, technical efficiency signifies a productive use of resources in the most efficient way (Kozuń-Cieślak, 2013, p. 22). Productive efficiency allows firms to optimize the size and costs of their production. However, if cost saving refers to the future, then we talk about dynamic efficiency. Research on dynamic efficiency shows that its effects provide more social welfare than static efficiency (allocative and productive) (Kozuń-Cieślak, 2013, p. 23).

Productive efficiency, however, does not end the problem of manufacturing products which are in line with consumer welfare, for it does not guarantee that the goods produced maximize consumer welfare. The structure and volume of production using the resources owned are also important. What is required for the production structure and volume to satisfy consumers is an effective allocation of resources. Allocative efficiency is less measurable in business practice and less discernible directly by economic undertakings. Its dimension is more macroeconomic and it is associated with such allocation of material and non-material resources across sectors and branches of economy that the products manufactured and services provided by these sectors and branches offer consumers values they most desire. Allocative efficiency is thus an economic phenomenon thanks to which only these production solutions are chosen from all available effective production solutions which ensure the greatest satisfaction in terms of consumption (as the result of allocating goods among consumers). In other words, the size and structure of production made from the resources allocated across industries (efficiency of production) ensure the highest possible level of consumer welfare (Kozuń-Cieślak, 2013, p. 22). It is possible because free competition ensures that market prices on a particular market at a particular time will be equal to marginal costs.

Next to static efficiency, dynamic efficiency was also introduced bringing some benefits to the antitrust analysis. J.H. de Soto argues that, from the dynamic perspective, the aim of economic activity is not only to avoid wasting resources, but first and foremostly to keep on discovering and creating new goals and resources; for the spirit of entrepreneurship goes on forever and never ends. When new non-adjustments emerge, entrepreneurs begin to find and solve them in an ongoing process, which keeps knowledge and resources growing. De Soto further stresses that waste cannot be entirely eliminated because there are always mistakes in new adjustments (De Soto, 2009, pp. 9–11).

Dynamic aspects of entrepreneurship are the most crucial, for entrepreneurs constantly improve their creativity and seek new chances of making profit. Dynamic efficiency also incorporates static aspects of economic efficiency, since each time new goals and resources are introduced, static efficiency increases as well. According to de Soto, it is dynamic efficiency, and not the static aspects of efficiency that should become a key factor in the considerations involved in every economic study and research. This is, among other things, because allocative and static efficiency are beyond reach by its very definition. De Soto argues that dynamic efficiency is the most important aspect of economic efficiency (De Soto, 2009, p. 29).

At this point it is important to emphasize which market environment can be considered to be friendly to dynamic efficiency. For static efficiency it is monopolistic competition, which here could be identified with free competition.

The situation is different for dynamic efficiency. Its proper environment is a market with oligopolistic competition. This results from the fact that the dynamic efficiency phenomenon founded on innovations requires that firms should have market power in order to win a windfall. Innovations need huge financial outlays which small firms from the free competition market cannot afford, gaining an average profit and only occasionally a windfall. From the point of view of dynamic efficiency, oligopolistic markets, more concentrated because of higher profits, are more productive and function better than small firms, although they can distort static efficiency, in particular, the allocative efficiency. But as already mentioned, dynamic efficiency can, in a long-term, compensate for losses sustained over the short period by improving productive efficiency.

Dynamic efficiency is part of business development strategies, while the aspects of static efficiency are part of operational activity aimed at finding ways and means to reduce production costs. Outlays on research and development with innovations being their outcome determine dynamic efficiency. Innovations can emerge as inventions, new technologies, production increase, new products, increased efficiency of distribution, new more productive business sales and organizational models, new effective methods of human resources management and others. Thus, dynamic efficiency stimulates growth and development in a long-term perspective. Moreover, static efficiency leads to a better operational use of existing material and non-material resources through their allocation, which is in line with consumer needs, across industries, and lower prices arising from the reduction of direct and indirect costs. Dynamic efficiency seen in this light also influences cost saving, only that unlike in the case of productive efficiency, it is revealed over a long period, over subsequent years of the development phase in the life-cycle of an enterprise, after having implemented innovative projects.

In an antitrust analysis, the aspect of the life-cycle of an enterprise should be taken into consideration in that short term effects are balanced out with long-term effects according to the values included in the consumer welfare standard. Balancing out these effects is key in the situation where the requirements posed by dynamic efficiency may cause static efficiency (allocative) to deteriorate. However, under free competition, it is possible to aim at and achieve both efficiencies and increase consumer welfare, although that is not so easy, as the literature tends to point out (Kathuria, 2015, p. 320). From the point of view of competition policy, it is about choosing between lower prices over a short term at static efficiency and relatively higher prices over a long-term at dynamic efficiency. The profit generated by higher prices is, however, necessary to finance the development and implementation of innovations, which will be paid back to consumers in the form of better or new

products (Kathuria, 2015, p. 319), and as their lower usage costs, too. Thus, the assessment as to the effects will be conditional on what time perspective is chosen for the assessment of market behaviors of enterprises.

In other words, some business behaviors may worsen static efficiency observed over a short time, yet in the long perspective they may be conducive to dynamic efficiency. For example, a merger may inject more money into research and development, that is, foster dynamic efficiency, while simultaneously worsen allocative efficiency by increased market power (Wiliamson, 1968, pp. 18–35). Tying and bundling may have similar positive effects if they take place in an innovative line of business, such as IT, pharmaceuticals, construction, business support services, media and telecommunication and e-business.

In forgetting the efficiency aspects in an antitrust analysis, the negative short-term effects regarding efficiency are likely to be more important for competition authorities than the unappreciated positive results yielded by dynamic efficiency (innovation) over a long period. This was precisely the choice the European Commission made while considering Ryanair plans to purchase the Irish air carrier Aer Lingus in 2007. Despite the fact that Ryanair showed significant benefits arising from this merger for productive and dynamic efficiency, the Commission did not give its approval to the merger because of a rise in market share of over 60% on the majority of flights operated jointly by the carriers and the likelihood that prices would increase and passengers would have a more limited choice, i.e. a deterioration of allocative efficiency[1].

Expanding the framework of considerations at this point, one should identify what changes, including technological progress and innovations, have been taking place for at least the last two decades in the market structure and competition processes. R. D'Aveni et al. (Ph. Kotler) talk in this situation about hypercompetition (D'Aveni, 1994). 'Hypercompetition is characterized by rapid and dynamic changes affecting competing firms in that they have to perform quick maneuvers in order to gain advantage'. What drives the pace of the groundbreaking turbulences triggered by hypercompetition are globalization, attractive substitutes, more fragmented consumer taste, deregulation and the constant influx of new business models. This leads to the emergence of a structural imbalance, collapse of the barriers to entry and dethronement of current leaders across a variety of industries (Kotler, 2016, p. 154). Hypercompetition is characteristic for high technology businesses which are adaptable to innovation. R. D'Aveni, a professor of business strategy, argues that today it is not possible to sustain competitive advantage over the long term. 'It is continually created, eroded, destroyed, and recreated through strategic maneuvering of enterprises disrupting markets, acting as if

[1] Commission Decision of 27.06.2007, COMP/M 4439 *Ryanair/Aer Lingus* (OJ C 47, 20.02.2008, p. 9).

there were no boundaries to entry. The way to go about winning today is to obsolete the current advantages of the leader' (D'Aveni, 1994, p. 154). He further asserts that in as much as hypercompetition undermines the traditional business development strategies, it makes antitrust policy obsolete. Such policy adversely affects hypercompetiton. Globalization and innovation make it difficult for firms not only to achieve a monopolistic position on the market, but even the oligopolistic one is hard to obtain (D'Aveni, 1994, pp. 362–378).

While rejecting the view that antitrust policy is no longer necessary and has gone by the board, two conclusions should be derived from these discoveries as to the way business is functioning. The first one refers to the perception of antitrust cases in the light of those changes and the search for answers posed by competition law should also be linked to the long perspective, and therefore the traditional approach founded on the paradigm of the Harvard School and Ordoliberal School can only disrupt effective competition. Secondly, one should look for the answers not only in microeconomics, but increasingly more in the contribution to the market, competition and business management made by scientific disciplines engaged in management.

Wishing to draw attention to the issues of economic efficiency, neglected by lawyers and economists in their proceedings of antitrust cases, the OECD presented a report titled *The Role of Efficiency Claims in Antitrust Proceedings in 2012*, in which the importance of economic efficiency was highlighted, while taking notice of the confusions involved in it. The confusions (delineated above) have the effect, according to the report, that even those who are more aware of having to include efficiency in the economization of competition law can make mistakes in its application[2]. That it is necessary for antitrust authorities to take more interest in efficiency was emphasized in the 2007 report of International Competition Network. The report argues that promoting efficiency is one of the goals of competition law. The efficiency that should be ensured included static as well as dynamic efficiency[3].

In competition law, referring to dynamic efficiency is justified while investigating concentrations, access to essential facilities, bundling, exclusionary transactions, predatory prices and excessively high prices, specialization and cooperation agreements, vertical agreements and resale prices[4]. The central unit of the concept of dynamic efficiency is innovation. T. Jorge and

[2] OECD, *The Role of Efficiency Claims in Antitrust Proceedings*, Competition Law &Policy, 2012, http://www.occd.org/competition/EfficiencyClaims2012.pdf (20.12.2016).

[3] The Unilateral Conduct Working Group, Report on the Objectives of Unilateral Conduct Laws, Assessment of Dominance/Substantial Market Power and State Created Monopolies, 6th Annual Conference of ICI, Moscow, May 2007.

[4] It is worth recalling at this point that in the recently passed legislation on competition protection in India, it draws on directly on dynamic efficiency.

D. Teesce associate innovations with research and inventions, development, improvement, adaptation and commercialization of new processes, new products, new organizational structure and new procedures (Jorde and Teece, 1990, p. 75). Research shows that innovations determine the productivity of firms, all industries and entire countries (Cameron, 1996). Thus, antitrust authorities should be equipped with analytical skills and be willing to accept practices which might appear to be anticompetitive in the context of static allocation, e.g. bundling sale, and pro-competitive according to the aspects of a dynamic analysis.

Accounting in the antitrust analysis for the aspects of static and dynamic efficiency which follow on from the adoption of consumer welfare as the only criterion in the enforcement of competition law brings about one more positive outcome, which tends to be either omitted or unnoticed. The valuable work of antitrust authorities as a public institution is no longer the result of subjective and simplified views of the staff employed by those institutions as to the role and goals they believe they are to realize with the help of competition law. Perceiving the standard of consumer welfare through static and dynamic efficiency limits such subjectivity, opening up the possibility to reveal the market processes which provide consumers with the value they expect. Under such circumstances, it is no longer what lawyers and economists working in antitrust institutions imagine about the market structure and behaviors that determines what is good for competition and consumers, and instead it is their verification on the basis of theories and methods provided by: microeconomics, studies and observations of changes taking place on the relevant market, and, in a specific antitrust proceeding, investigating the history of growth of firms suspected of anticompetitive behaviors with a view to find out how they build their market position (advantage), whether it is by unfair monopoly or by innovation and development. In applying this approach, it is the market that is given priority over administrative decisions, with antitrust bodies retaining their function of a regulatory body and not that of replacing market forces.

How the assessment of some behaviors of market dominant firms or of vertical agreements (seen in traditional antitrust doctrine as limiting competition) changes when efficiency criteria are given the center stage in the evaluation process is demonstrated by the two examples below.

The first one involves making a dominant firms' essential facilities available to competitors. The decision of a competition authority allowing competitors to access such facilities despite the owner's protest certainly intensifies competition over a short period. However, it may have negative consequences in the long run. Forcing owners to allow access to their facilities, built with huge effort and intellectual capacity, to competitors may induce such investors to give up further development of such facilities and improvement of devices,

since the regulator deprived them of the 'award' for managing their business effectively and for risk taking (Lemley, 1997, pp. 994–996). Other investors, watching this kind of practice on the part of regulators, may not engage in the development of capital-intensive and risky investments if they have to share the benefits thus achieved with their rivals who either eschew this kind of outlays or do not have sufficient capacity. Winning a smaller profit from the market also reduces its capabilities in terms of financing outlays on research and development and recovery of the fixed costs which represent R&D expenditures. Thus, the decision of antitrust bodies limits dynamic efficiency if it affects an innovative firm, whose history of growth and line of business should reflect its innovative nature.

Another example of the dominant's price practice is predatory pricing which takes place when innovations form the basis for this pricing. Setting prices by dominants below the costs brings immediate benefits to consumers. However, there is a risk that the relevant market will not function effectively in the future if this price maneuver eliminates competitors, allowing the dominant for a deeper penetration of the market over the long run and thus its monopolization, which will raise prices above the level before predatory pricing to the detriment of consumers.

But are the consequences of predatory pricing always the same? An exact answer depends on the information gathered by the antitrust authorities. However, in such cases the antitrust bodies, as a rule, have to contend with an information deficit as to the future market behavior of dominants and struggle with weighing up the positive and negative effects of such practice. Under such circumstances, help could be found in looking at the history of the dominant's operating on the market and its competitors, which will show whether or not such behaviors happened before. Innovation within the industry should be taken into consideration and its impact on the length of the product's life-cycle. One can also search for the answer in a relevant economic theory which makes the way dominants might behave plausible, i.e. whether they will keep the lower prices or push them up to the level of monopolistic prices. In the first case, the decision finding the practice anticompetitive will very likely affect adversely the behavior of an undertaking affected by such decision in that it will cease to engage in development activities. In the second case, on the other hand, according to the dominant's business logic, an undertaking will not fail to take the opportunity and raise prices above the competitive level. And if it uses the windfall thus generated to continue its pro-development activities, while firms which are weaker in terms of productive and dynamic efficiency fall out of the market, which will improve allocative efficiency, the classification of such prices as practices which do not limit competition is in line with the concept of the consumer welfare standard.

IV. Aspects of static and dynamic efficiency at tying as exemplified by *Microsoft* case

While analyzing aspects of dynamic efficiency in competition law, an essential part of this analysis is to identify the economic environment that is beneficial to this efficiency. As we recall, monopolistic competition is an economic environment that is suitable for static efficiency. That is not the case for dynamic efficiency. Its proper environment is the oligopolistic competition market.

The earlier reflections let us conclude that the most difficult issue in the dynamic efficiency analysis is the situation when an antitrust body is facing two different results of the assessment of the market behaviors of enterprises, depending on whether the results pertain to a short or long term, i.e. should they promote the immediate benefits for consumers in the context of later losses, or the other way round, the immediate benefits should be sacrificed, assuming that the limitations accepted will bring desirable behaviors and benefits to consumers in the future. In such cases it is less the law and more the goals of competition policy adopted by antitrust authorities that has a deciding voice. Taking into account the socio-economic context, the antitrust authority must decide whether it trusts market forces and development and thus chooses the assessment of a particular practice from the longer perspective, or whether it opts for short term goals, with allocative and productive efficiency not necessarily being its guide. In such a case, it would assess a particular practice as reprehensive, considering its current effects to be harmful to the market and consumers.

This kind of situation is demonstrated by the case of Microsoft, investigated by the US and EU antitrust authorities. The US Department of Justice and the European Commission accused Microsoft of abusing its market dominant position by integrating the sale of its basic product, Windows OS, exclusively with its application (Media Player in Europe and Internet Explorer in the EU and the USA). The antitrust proceedings conducted over several years on both sides of the Atlantic proved to be different in terms of the outcomes. The difference in the perception of Microsoft's practice of integrating its operating system Windows for personal computers with the company's other software was caused by a different assessment of the effects of Microsoft's sales model designed for the products offered to the PC manufacturers and their users, despite the fact that the US and EU antitrust authorities applied the same standard in their assessment – consumer welfare. The Commission investigated mainly the aspects relating to the static efficiency while the American institutions, largely the courts, eventually supported effects resulting from the dynamic efficiency argument.

In its assessment of the integrated sales model of Microsoft's products (market-dominant operating system Windows together with Media Player and Internet Explorer), the Commission classified it as a practice prohibited under Art. 102 TFEU. In issuing its decision in 2004 on the tying of Windows OS with Media Player, and in January 2009 on the sale of Windows OS together with Internet Explorer, the Commission referred to the baseline ruling of the European Court of Justice (ECJ) in the *Hoffman-LaRoche* case[5]. In its decision, the ECJ contended that, pursuant to Art. 102 TFEU, a prohibited conduct takes place when an undertaking holding a dominant position deprives clients of the opportunity to choose freely their own source of purchase while blocking access of other producers to the market by directly or indirectly tying its clients in that they are compelled to purchase products from the dominant undertaking. In 2007, this position was confirmed by the Court of First Instance (CFI) considering Microsoft's appeal against the Commission's decision of 2004. The CFI's ruling established unequivocally that the tying of Media Player with the Windows PC operating system constituted an abuse of the dominant position on the market of PC operating systems[6]. Thus, the Commission did not entertain any more doubts when it came to the second case and decided that Microsoft abused its position by bundling Windows OS with Internet Explorer. In its Statement of Objections sent to Microsoft in January 2009, the Commission argued that Microsoft, having a 90% share of the PC operating system market, distorted competition by tying and protected its web browser Internet Explorer from other web browsers produced by competitors, which slowed the pace of innovation and hampered quality of products bought by consumers. The Commission drew a particular attention in its objections to the fact that with Internet Explorer being so wide-spread, an artificial incentive was created for suppliers and designers of computer applications to design those programs in such a way as to make them in the first place compatible with Internet Explorer, which weakened competition and innovation within the services provided to consumers[7].

The Commission certainly followed the standard of consumer welfare in its first as well as the second case brought against Microsoft. However, in drawing on the potential of this standard, the Commission considered mainly the aspects of economic efficiency (allocative) resulting from the structure of the market, that is, a strong and dominant position of Microsoft on the market of PC operating systems and barriers to entry created by the tying model

[5] ECJ judgment of 13.02.1979, Case 85/76 *Hoffman – La Roche v Commission*, ECLI:EU:C:1979:36.

[6] CFI judgment of 17.09.2007, Case T-201/04 *Microsoft v Commission*, ECLI:EU:T:2007:289.

[7] European Commission, Press Release*: Commission confirms sending a Statement of Objections to Microsoft on the tying of Internet Explorer to Windows*, Brussels, 17.01.2009).

launched by Microsoft. According to the Commission's assessment, in this way Microsoft strengthened its dominant position, generating negative effects for innovation within the market of computer software, and thus also generating negative outcomes for the users of personal computers. Yet, the Commission traced back these negative effects for dynamic efficiency, which is embodied in innovation, to structural factors, disregarding the potential arising for dynamic efficiency from the tying itself within the computer software industry. Playing down the aspects of dynamic efficiency contained in this kind of sales model within the IT industry is what makes it different from the American antitrust authorities.

The American Department of Justice began its battle against Microsoft earlier than Europe, already in 1998. In the first years of its antitrust proceedings, the Justice Department interpreted market implications of the operations of the market leader of the PC operating systems in the same manner as the Commission.

But less than 10 years from considering breaking up Microsoft, the U.S. antitrust authorities radically revised their initial legal judgment with respect to Microsoft's bundling Windows OS with Internet Explorer, seeing it as having a positive impact on economic efficiency through the development of Microsoft's innovation capabilities in the long run and economic benefits which consumers receive over a short period. In President G. Bush's administration, Microsoft found a strong ally in cases it faced outside the United States. In 2004, the Department of Justice expressed critical opinion on the punishment of Microsoft by the EU for including Media Player in its Windows operating system. In December 2005 the South Korean antitrust regulator was criticized when it prohibited the bundling of the Microsoft products (Media Player and Windows OS) and fined Microsoft USD 31 million. In the letter addressed to the Korean Fair Trade Commission, the US Department of Justice wrote that antitrust policy should protect competition and not competitors and should avoid cooling off innovation and competition also when it pertained to dominant undertakings. Moreover, the regulator should eschew trying to replace the market with its own judgments in that it was now the regulator determining how products should be made available to consumers (Ponsold and David, 2007, p. 422).

The disparities present in the application of competition law in the two key world centers of its enforcement are therefore quite striking. Two identical cases and two different positions traced back to the same phenomenon, i.e. the implications for innovation and the interpretation of consumer benefits obtained from these innovations. How it came to that will be the subject of further analyses.

V. Antitrust assessment of tying in the USA and EU using the example of *Microsoft* case

In 1998, the Department of Justice in its suit filed against Microsoft contended that Microsoft's monopolistic position on the market of operating systems was of lasting nature, for it restricted the entrance of other competitors into the market. This was not only because the vast majority of computer software worked only in the environment of Windows OS, but also because the new applications were designed in such a way as to function under this system. Users purchasing personal computers, being interested in various application software did not favor web browsers produced by other companies, since they could not work with the Windows operating system. This kind of sales scheme strengthened Microsoft's position on the market of both products, for it created a strong barrier preventing other companies engaged in web browser sales from entering the market, as the market was reserved solely for Microsoft's Internet Explorer. As a result, competing software producers encountered 'a barrier to entry for application software', being the outcome of the determination amongst the application creators to direct their efforts towards creating products compatible with the most commonly installed software. In referring to the analysis of 'possible benefits' coming from bundling, the Department of Justice contended that Windows 98 was a product comprised of two separate programs – an operating system and a web browser, which were technologically 'tied with each other' bringing no benefits to users. It therefore asserted that Microsoft restricted competition on the web browser market by discouraging end-users from installing and using web browsers other than Internet Explorer and regarded this kind of conduct as unlawfully maintaining a monopoly, which violated Section 2 of Sherman Antitrust Act, and as an illegal tying violated Section 1 of the same act (Bagdziński, 2008, pp. 144–151).

In its defense, Microsoft presented various arguments. For example, it insisted that Internet Explorer did not exist within the structure of Windows 98 as a separate product. It was merely a logical and natural part of Windows, which was an innovative solution. Following the company's arguments, the integrated architecture of Windows 98 brought about an increased efficiency of the system which was achieved, among other things, in that all functions of the operating system and services for the platform were supported by the Internet Explorer technologies. In addition, the installation of the Internet Explorer technologies onto Windows 98 provided users with the possibility to use a higher degree of software compatibility and a very advanced implementation of the function of a web browser. According to the defendant, these positive effects, which were

achieved thanks to designing such an 'integrated architecture', allowed this kind of integration to be seen as one product (Bagdziński, 2008, p. 148, 149).

Moreover, Microsoft questioned the legal reasoning behind accusing the company of imposing any condition in their sale of the operating system with the web browser (as an element of tying), explaining that there was no tying arrangement when the tied product was offered for free. It further argued that this integration (bundling) could not generate any restrictions in terms of competition because the company stopped neither the PC manufacturers nor users from obtaining, installing or using any kind of competitive web browser on their personal computers (Bagdziński, 2008, p. 148, 149).

However, in its settlement of the dispute between the US Justice Department and Microsoft in 2000, the District Court rejected the company's line of defense and did not accept the business logic behind the argument presented, above all that the company's bundling represented an innovative model that had never been used before. Also, the court disregarded the likely advantages to be gained by the IT tools manufacturers and end-users. For end-users, it could be valuable to receive products as a bundle because they incur smaller transaction costs and avoid other inconveniencies. Moreover, bundling allows innovative firms to cover their fixed costs linked to research and development expenditures. On top of that, there was no assessment as to the actual or potential impact on competition among the suppliers of competitive software which was aimed at the development and market launch of improved tools designed for web browsing.

Rather that conducting such an analysis, the Court confined itself to and focused on the goals and effects of tying as specified by the Department of Justice, which contended that the possibility of installing competitive web browsers (in particular Navigator software) onto personal computers would threaten Microsoft's monopoly on the operating system market if the competitive browsers were to be sufficiently wide-spread. The government authorities were mainly interested in Netscape Navigator, a flagship product of Netscape Communications, which used to hold a dominant position on the market of web browsers in the 1990s, losing it later to Microsoft Internet Explorer.

The District Court in its interpretation of tying as forcing licensees, including consumers, to purchase and pay for the entire software bundle concluded that Internet Explorer was simply 'software' attached to the Windows operating system, in this way making up a Windows 98 bundle[8]. It contended that Microsoft took advantage of its monopoly power on the market of web browsers in that it tied Windows 98 to its web browser Internet Explorer, which was to enable

[8] *U.S. v. Microsoft*, 87 F. Supp.2d 30 (D.D.C. 2000).

Microsoft to establish leveraging in the market by unlawfully combining two separate products, namely Windows and Internet Explorer into one. The Court justified its ruling as follows: Microsoft holding a monopolistic position (95% of the market) on the market of operating systems created a strong barrier to entry for other providers of web browsers, since Microsoft's operating system functioned as a platform for other applications which computer users considered to be key and vital[9]. At this point the Court agreed with the Justice Department that the Navigator software along with a set of applications Java Virtual Machine of Sun Microsystem represented a partial substitute for the software of the Windows operating system and offered an opportunity of opening the operating system market to Microsoft's rivals (Bagdziński, 2008, pp. 144–151). In ruling against Microsoft, the Court drew on the four-element test used to assess a tying arrangement developed according to the rule *per se illegal* by the Supreme Court in 1984 in the Jefferson Parish case. One of the criteria of this test is the demand to sell products separately[10].

In its final assessment, the District Court proved to be even stricter than the Commission several years later. A few months following its final judgment, the Court ordered a remedy in the form of Microsoft's divestiture, splitting the company into two separate companies; one was to be engaged solely in operating systems and the other in the entire application software. The company appealed against the District Court's ruling and in 2001 the Court of Appeals found that Microsoft used anticompetitive means to maintain its monopolistic position on the operating system market but rejected the view that the company was also seeking to monopolize the market of web browsers. With respect to the unlawful tying of the web browser with the operating system, the Court of Appeals did not overturn the ruling but referred the case back for reconsideration, this time according to the rule of reason, dismissing the *per se prohibition* rule as incorrect. Further, the Court of Appeals overturned entirely the ruling which ordered Microsoft to implement remedies in the form of the company's breakup. On top of that, the Court of Appeals rebuked the District Court for its conduct, seeing it as unacceptable and unethical*, ex parte*, in that it carried out the investigation in the interest of only one party. The District Court maintained undisclosed contacts with the media and made numerous offensive comments pertaining to the representatives Microsoft Company outside the courtroom[11].

[9] Ibidem.

[10] *Jeffersonn Parish Hospital v. Hyde*, 466 U.S. 2,9. 1984. This ruling attracted a wide-spread criticism over the next years. It was commonly recognized that the appropriate standard for tying was the rule of reason, according to which three adversary effects are compensated with benefits, even when firms holding a monopolistic position are involved in such sale.

[11] *U.S. v. Microsoft Corp*., 253 F 3.d 34, 56 (D.C. Cir. 2001).

In the re-examination of the case at a district court, the final dispute between the Department of Justice and Microsoft was settled in November 2004 by a consent decree. The decree imposed on Microsoft a number of prohibitions and obligations, including, among others: (i) conclusion of license agreements with PC manufacturers which would render their cooperation with other software suppliers impossible; (ii) restricting hardware manufacturers in their distribution and promotion of other companies' software applications; (iii) prohibiting PC manufacturers from automatic activation of other than Microsoft's applications while login or connecting with the Internet; (iv) making all interfaces available through the Microsoft application software for the connection with Windows operating system; (v) obligation not to undertake any retaliatory measures against suppliers and sellers of competitive application software; (vi) providing no support and assistance as incentives aimed at deterring them from the development, usage, distribution and support of programs competitive with those of Microsoft. Those restrictions were binding to Microsoft until 2010.

What disappeared from the terms of the decree consent was the original unlawfulness of sale of an integrated product, that is, the sale of Internet Explorer tied with Windows OS as one product, and the classification of such practices as *per se prohibition*, even when they refer to an undertaking holding a strong dominant position. The concept that prevailed was that the antitrust analysis should be conducted in accordance with the rule of reason. The Justice Department altered its position which was very restrictive initially in that it followed the aspects of economic efficiency which the standard of the rule of reason imposed. Its framework includes, for example, the right of an innovative firm to draw benefits from its competitive advantage, the firm's capacity to further innovation thanks to an integrated sales model and taking into consideration the benefits such sales brings to consumers in the short and long term.

It was not only the ruling of the Court of Appeal that changed the approach of the governmental antitrust authority towards bundling on the market of advanced technologies but also numerous comments received in relation to the Microsoft case. Commentators drew attention to the obvious, valid and immediate economic benefits which consumers derived from this kind of computer programs integration. Bundling of software designed for playing digital audiovisual files downloaded from the Internet, as well as from CDs and DVDs with the Windows operating system allowed consumers to avoid additional costs, including transaction costs incurred while buying them separately. Economic reasoning points out that suppliers of these products will sell them cheaper when in a bundle than when separate (Carlton and Perloff, 2006, p. 69–73).

In Europe, however, this point of view was dismissed by the Commission. In its decision issued in 2004, the Commission prohibited the sale of the Windows operating system installed on personal computers bundled with the Media Player application. Since 1976, Microsoft held a monopolistic position (90%) on the European market of operating systems, while on the market of operating systems for work group servers it held a dominant position (60%). As remedial actions, the Commission ordered Microsoft to make within 90 days a full and functional version of the Windows operating system for PCs available to PC manufacturers without the Media Player application and ordered Microsoft to undertake no action in the future that would have similar market effects[12].

The Commission found the argument that tying lowered transaction costs for consumers by saving time and confusion through having a set of default options in a personal computer 'out-of-the box', to be inaccurate. The fact that the pre-installation of a multimedia player together with an operating system in a client computer is advantageous does not yet mean that Microsoft should choose a multimedia player for consumers. Taking notice of the benefits of such transactions, it, nevertheless, contended that the short-term benefits did not compensate for the negative effects in the long run in the form of a deteriorated market structure for competition leading to the weakening of competition on the market of multimedia players. According to the Commission's assessment, Microsoft would create a strong barrier to entry for producers of such applications through its strong and dominant position on the operating system market. The Commission justified its position asserting that on the basis of the case law of the Court, it was not required to provide evidence that competition had already been distorted and that there was a risk of the elimination of all competition. Thus, the Commission emphasized the role of preventive control which it had to fulfill. Otherwise – as it further clarified – its intervention to detect anticompetitive practices would come too late, since proving that such practices are impacting the market would only be possible after such impact had already occurred. In this way, the Commission took the position that market forces themselves would not open up the European market more widely to other providers of multimedia applications and therefore it had to be done by the regulator[13].

In the context of the Microsoft case it can be seen that the EU antitrust authorities do not perceive any benefits that could be derived from bundling for consumers. According to the Commission, in holding a dominant position Microsoft brings no advantages to consumers, since they have been deprived

[12] Commission decision of 24.05.2004, COMP/C-3/37.792 – *Microsoft* (OJ L 32, 6.02.2007, p. 23).

[13] European Commission, Press Release IP/04/382*: Commission concludes on Microsoft investigation, imposes conduct remedies and a fine*, Brussels, 24.03.2004.

of the possibility to purchase Windows OS without Windows Media Player. Moreover, such a sales model significantly restricts competition on the market of operating systems and application software, for Microsoft effectively blocked entry for other providers to the market of application software and their functioning on this market. It is true that the EU authorities considered the context of innovation within the IT segment, the risks accompanying innovative undertakings, sustainability of Microsoft's competitive advantage, but eventually they rejected these efficiency aspects. Also disregarded were arguments which underscored the benefits for consumers when receiving two IT products in one bundle. The Commission assumed that consumers perceived these two products as separate. Unlike the US authorities, the Commission and the Court omitted these issues. Perceiving both products as separate may be different to what values consumers attribute to the same products when purchased in a bundle. At the same time, the Commission relied on no evidence that would indicate what inconveniences consumers saw in a bundle and what benefits they derived from it. In their assessment, the Commission and the Court followed four structural criteria, already established in the past:

1) the tying and the tied are separate products;
2) the accused entrepreneur holds a dominant position on the market of the tying product;
3) the dominant provides clients with no possibility of buying the two products separately;
4) the dominant undertaking eliminates competition on the market of the tied product, imposing on consumers the demand for the tied product.

While creating a phenomenon called monopoly leveraging[14], and reducing consumers' autonomy (sovereignty), these factors restrict competition on the market of the tied product, which in this case is the Media Player application.

The critics of this case law pointed out numerous shortcomings on the part of the Commission, resulting from neglecting the analysis of efficiency aspects combined with the innovation of IT products. These shortcomings included the fact that consumers expected a certain kind of functionality from computers and would be disappointed in buying a computer without a media player application. Many of them believed that Media Player and Windows OS are not separate market products Critics emphasize that the competition policy in the US is more consumer-oriented than it is in the EU. Its primary goal is neither individual competitor protection nor that of the market structure. The EU policy, on the other hand, is seen as strongly focused on the market structure so as to enable it to retain the model of free competition. Further, it is concerned with promoting economic activity and entrepreneurship across

[14] Monopoly leveraging implies using a monopoly power obtained on the market of the basic product to achieve benefits on the market of the product tied to the basic product.

the entire EU market and with social aims, such as cohesiveness and solidarity among member states (Ponsoldt and David, 2007, p. 445 and 446).

The perspective afforded by the long-term analysis based on the belief in market forces and on the effects of dynamic efficiency proved to be right in the United States. Over the next decade, Microsoft lost its market power in operating systems. Along with the development of the digital economy and e-business, today it must face not only the "old" rivals like Linux and Apple, but also AOL, Netscape, Sun and Oracle.

VI. Conclusion

The aspects of efficiency adopted in the approach towards tying and conclusions drawn from the changes the market has been experiencing make the application of competition law in the USA different from the way it is applied in the EU, and thus in the EU member states. Europe believes that it cannot protect competition without protecting competitors, that this will make competitive markets more innovative in the long term, and that the regulator should exercise an active role in promoting innovation. The Commission and European courts do not believe that a dominant undertaking can play a beneficial role in the development of innovation in the long run. As the example of Microsoft shows, the Commission favors short-term effects of competition and hence regulation over the effects of competition forces that come later. It continues then to favor not only the protection of small companies, less effective and competitive, but even their support. Some academics argue that such a stringent approach to tying and the structural analysis of its effects stifles dominant software undertakings to the detriment of innovation and consumers. Entrepreneurs are forced to comply with the rules which do not suit the sale of their products (Ponsold and David, 2007).

In the structural approach, the assumption is that monopolistic power allows an undertaking to control prices and exclude competition, and to implement leveraging practices through tying and bundling, and ultimately to set prices above the competitive level. As it is not easy to prove directly that prices are above the competitive level, the market structure is examined in order to find evidence of monopoly. According to this structural approach, a monopolistic power can be gleaned from the calculation of market shares and attributing it to undertakings holding a dominant position on the relevant market, with this position being protected by a barrier to entry. Barriers to entry are factors preventing new players from entering the market when prices on the market rise above the competitive level. However, an antitrust body

should carefully balance anticompetitive effects against pro-competitive effects of an alleged unilateral practice and should avoid following an intuitive belief that the practice in question is harmful so as not to make the mistake of any over-rigorous interpretation of the concept of an abuse of a dominant position The European case law, however, does not require from the Commission to perform this kind of work.

This traditional structural approach developed by the Harvard School has thus been not abandoned completely in Europe, as demonstrated by the *Microsoft* case. In the United States, the antitrust authorities proceeding in the same case eventually turned towards efficiency criteria, according to the benefits yielded by dynamic efficiency. In the same year of 2004 in which the Commission was punishing Microsoft by imposing a high fine of EUR 497 million, the United States saw the Supreme Court's ruling in the famous case of *Trinko*[15]. In its decision, the Supreme Court validated the legitimacy of the efficiency approach adopted for the assessment of monopolistic behaviors of undertakings not only with respect to tying arrangements.

The case of a local telecommunication company, Trinko, was linked to the essential facilities doctrine. In the context of this case, the Supreme Court contended, with regard to the behavior of a monopolistic undertaking, that holding a monopoly power in itself and the monopolistic price associated with this position not only do not violate the law, but represent a valid element of the free market economy. The chance of setting monopolistic prices, at least in the short term, is, firstly, an incentive for private entrepreneurship and secondly, it induces individuals to take risk arising from innovation and economic growth. With a view to protect the tendency to innovate, having monopolistic power will not be assessed as law violation, unless this power is accompanied by anticompetitive behavior. At this point it is worth noting that the Supreme Court's position just presented draws directly on Schumpeterian theory of development through innovation formulated over 90 years ago.

The Supreme Court's ruling was bound to attract sharp criticism (Waller, 2006) voicing similar arguments to those cited by the District Court in its judgment regarding the Microsoft case. Finally, it is noteworthy that with the judgment of 2007 pronounced by the Supreme Court in the *Leegin* case[16], where it applied the rule of reason also to minimum re-sale prices, the case law of the US Supreme Court reduces the areas of the law's application which traditionally have been reserved to it by increasing the role of economics in competition law. Also, we see clear differences between the USA and Europe in this process. Furthermore, what is important, as illustrated by the *Microsoft*

[15] *Verizon Communication Inc. v. Law Offices of Curtis v. Trinko*, LLP, 540 U.S. 398, 2004.

[16] A detailed economic analysis of vertical price agreements relating to the ruling on *Leegin* can be found [in:] Jurczyk, 2016b.

case, is that each line of competition law enforcement presented in the paper will continue to cause much controversy among commentators.

Literature

Bagdziński, T. (2008). Wiązanie Internet Explorer z Windows na tle historii postępowań antytrustowych przeciwko Microsoftowi w Stanach Zjednoczonych. In: D. Miąsik, T. Skoczny, M. Surdek (ed.), *Sprawa Microsoft – studium przypadku. Prawo konkurencji na rynkach nowych technologii*. Wydawnictwo Naukowe Wydziału Zarządzania: Warszawa.

Bork, R.H. (1993). *The Antitrust Paradox: A Policy At War With Itself*. Free Press: New York.

Cameron, A. (1996). *Innovation and Economic Growth*. Center for Economic Perfomance Discussion Papers. No. 277. Retrieved from: http://eprints.lse.ac.uk/20685/1/Innovation_and_Economic_Growth.pdf (20.12.2016).

Carltone, D.W. and Perloff, J.M. (2006). *Modern Industrial Organization*. Pearson.

European Commission (2009). *Commission confirms sending a Statement of Objections to Microsoft on the tying of Internet Explorer to Windows* (Press release). Brussels.

D'Aveni, R.A (1994*). Hypercompetition: Managing the Dynamics of Strategic Maneuvering*. Free Press: New York.

De Soto, J.H. (2009). *The Theory of Dynamic Efficiency*. New York–Abingdon. Retrieved from: http://www.jesushuertadesoto.com/the-theory-of-dynamic-efficiency (20.12.2016).

Devlin, A. and Jacobs, M. (2010). Antitrust Divergence and the Limits of Economics. *Northwestern University Law Review*, *104*(1).

Jorde, T.M. and Teece, D.J. (1990). Innovation and Cooperation: Implications for Competition and Antitrust. *Journal of Economic Perspective*, *4*(3), 75–96.

Jurczyk, Z. (2012). *Kartele w polityce konkurencji Unii Europejskiej*. C.H. Beck: Warszawa.

Jurczyk, Z. (2016a). Kartele a ekonomizacja. In: T. Skoczny (ed.), *Prawo konkurencji. 25 lat*. Wolters Kluwer: Warszawa.

Jurczyk, Z. (2016b). Co dalej z minimalnym cenami odsprzedaży. In: A. Fornalczyk, T. Skoczny (ed.). *Ekonomia ochrony konkurencji. Ograniczenia wertykalne*. Wydawnictwo Naukowe Wydziału Zarządzania UW: Warszawa, https://doi.org/10.7172/978-83-65402-23-3.2016.wwz.6

Kathuria, V. (2015). A conceptual framework to identify dynamic efficiency. *European Competition Journal*, *11*(2–3), 319–339, https://doi.org/10.1080/17441056.2015.1060006

Kotler, Ph. (2016). *Twarzą w twarz z kapitalizmem. Realne rozwiązania dla niezdrowego systemu ekonomicznego*. MT Biznes: Warszawa.

Kozuń-Cieślak, G. (2013). Efektywność – rozważania nad istotą i typologią, *Kwartalnik Kolegium Ekonomiczno-Społecznego Studia i Prace*, *4*, 13–42.

Lemley, M.A. (1997). The Economics of Improvement in Intellectual Property Law. *Texas Law Review*, 75.

OECD (2012). The Role of Efficiency Claims in Antitrust Proceedings, Competition Law &Policy. Retrived from: http://www.occd.org/competition/EfficiencyClaims2012.pdf (20.12.2016).

Ponsold, J.F. and David, Ch.D. (2007). Comparison between U.S. and E.U. Antitrust Treatment of Tying Claims Against Microsoft: When Should the Bundling of Computer Software Be Permitted? *Nortwestern Journal of International Law & Business*, *27*(2), 421–451.

Szymczak, W. and Szadkowski, N. (2016). Rola ekonomii w prawie konkurencji – teoria i praktyka polskiego organu antymonopolowego. In: A. Fornalczyk, T. Skoczny (ed.). *Ekonomia ochrony konkurencji. Ograniczenia wertykalne*. Wydawnictwo Naukowe Wydziału Zarządzania UW: Warszawa, https://doi.org/10.7172/978-83-65402-23-3.2016.wwz.6

Sroczyński, J. (2016). O potrzebie (i pułapkach) bardziej interdyscyplinarnego podejścia do publicznego i prywatnego prawa konkurencji. In: T. Skoczny (ed.), *Prawo konkurencji. 25 lat*. Wolters Kluwer: Warszawa.

Sroczyński, J. (2016). Ekonomia behawioralna jak narzędzie analityczne w prawie konkurencyjności, [in:]. A. Fornalczyk, T. Skoczny (ed.). *Ekonomia ochrony konkurencji. Ograniczenia wertykalne*. Wydawnictwo Naukowe Wydziału Zarządzania UW: Warszawa, https://doi.org/10.7172/978-83-65402-23-3.2016.wwz.6

The Unilateral Conduct Working Group, Report on the Objectives of Unilateral Conduct Laws, Assessment of Dominance/Substantial Market Power and State Created Monopolies, (2007) 6th Annual Conference of ICI, Moscow

Waller, S.W. (2006). Microsoft and Trinko. A Tale of Two Courts. Loyola University Chicago, School of Law. LAWeCommons. Retrived from. http://lawecommons.luc.edu/cgi/viewcontent.cgi?article=1037&context=facpubs (29.05.2017).

Williamson, O.E, (1968). Economies as an Antitrust Defence: The Welfare Tradeoffs, *American Economic Review*, 58.