EKONOMIA ECONOMICS 3(15) • 2011

ISSN 2080-5977

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INTERDEPENDENCE OF COMPETITION THEORIES AND REGULATION OF COMPETITION. HISTORICAL CONTEXT AND ITS IMPLICATIONS FOR THE INSTITUTIONAL CHANGE ILLUSTRATED BY TWO EXAMPLES

Summary: The following paper examines the connections between economic competition theories and the practice of antitrust law. The main objective of this paper is to analyse the historical sequence of the theoretical findings of economists and rulings of judges and jurors in antitrust cases. The main hypothesis is that the theory of economics neglects the current needs of antitrust authorities and usually analyses implemented mechanisms *ex post*. This hypothesis is substantiated with two examples: Sherman Act introduction and justification and relevant market analyses conducted in many antitrust cases.

Key words: antitrust law, competition, economic competition theories, Sherman Act, relevant market.

1. Introduction

The formal institutional backbone of competition regulation was created first in the US, between 1890 and 1914, taking the form of two Acts: Sherman's and Clayton's.[1] From that point in time competition law spread among countries. The US experience strongly influenced the introduction of antitrust legislation in the majority of states. After the Second World War, Germany and Japan were forced to implement American-style competition regulations. It was commonly perceived that Hitler's and the Emperor's position in their countries and the thankfully temporary victory of nationalisms was the result of protectionism, cartelization, and monopolization of economy [Freyer 2006, pp. 99-102]. In the United Kingdom common law served as a base for competition regulation through a series of rulings dating back to the 15th century. The Treaty of Rome introduced competition regulation in the European

[1] This is true for modern law. However, one should remember about earliest examples of competition regulations, dating back to the Roman Empire, where the actions of guilds and merchants fell under the scrutiny of law. British common law should also be mentioned, as it is perceived that the US antitrust legislation is a descendant of British case law [Wilberforce *et al*. 1957, p. 8].

Economic Community, which was further, after Maastricht Treaty (1992) and Amsterdam Treaty (1997), harmonized in Member States' law, including the UK (after its accession in 1972). Currently, antitrust legislation of the EU is covered in the Treaty on the Functioning of the European Union, Articles 101 and 102, and the Council Regulation 139/2004 EC. This regulation and its implementation closely resembles American antitrust law.

Looking at the antitrust legislation without the historical context, such institutions might be perceived as the realization of all textbook theories, depending however on who is the author. The achievement of free competition, unconstrained entrepreneurship, fair distribution of welfare – such terms look good in media discussions but are ambiguous in scientific discourse. What does free, unconstrained, and fair mean, how can we define competition or welfare? Those are the foundations for the discussion about antitrust, but despite the widely debated defects of broadly understood competition law, it is met with common acceptance and support among economists all around the globe. Exactly 48.9% of surveyed[2] economists generally agreed, and 37.3% agreed with provisions to the statement that "antitrust laws should be used vigorously to reduce monopoly power from its current" level [Frey *et al.* 1984, p. 988].

One of the legal scholars, both practitioner and theorist, R. Bork hypothesizes that law has a tendency to formulate fundamental answers before even the right questions have been posed. In his opinion, in English and American legal tradition it is not uncommon that before the legislator realizes real questions, the answer prematurely given, despite its invalidity or irrelevancy, becomes the rule and is transformed and transferred further into law and business [Bork 1993, p. 16]. It is evident that Bork advocates that consumers might sometimes be beneficiaries of higher market power or even some antitrust laws hurt customers instead of protecting them. However ideological it might sound, it is crucial to remember and understand the sequence of events concerning the regulation of competition and the economic theory of competition.

It is not unreasonable to ask the question: Does the theory of economics have an influence on formal institutions regulating competition? Such a question unintentionally forces a positive answer by the way it was asked. Instead, one can ask: Were competition institutions formalized first and corresponding theories created afterwards in order to substantiate them rightly or not? Both such questions seem biased; however, the second one will serve as the main problem of this paper. In the following two sections, using two examples, the Author would like to demonstrate the plausibility of the hypothesis that competition regulation, rarely (in the case of fundamental institutions – never) go together with competition theories. Theory substantiates regulatory institutions, but does it *ex post*. It might seem like the proverbial chicken or the egg dilemma; however, it is crucial and relevant to solve it.

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[2] The survey sample consisted of 936 economists.

2. First example: the Sherman Antitrust Act

Being a milestone of competition regulation, the Sherman Antitrust Act was introduced in 1890. At that time, it was supported by numerous intellectuals – mostly everyone had high expectations and hopes, but not economists [DiLorenzo, High 1988, p. 423]. It might seem awkward that the group of scholars whose interests lay the closest to the regulated problem did not perceive this institutional change as beneficial.

Stigler pointed out three possible reasons for the "coolness" of economists towards the Sherman Act. Firstly, he suggests that economists did not see the importance and harmful effects of collusion, especially the tacit ones. After the change in opinions and the development of proper economic theories – the attitudes changed. Secondly, he thinks that economists overrated public regulation and ownership as the means of solving problems with monopolies. However, he points out that for every criticism based on government failure (in many areas: roads and other infrastructure investments, income policy and price controls, transportation and agriculture regulation), one can find more than one evidence of market failure. Thirdly, he observes that antitrust cases are one of three or four major sources of income for economists, which is a rather strong argument, but content-unrelated and possibly clouding the whole problem [Stigler 1982, pp. 5-6]. Stigler himself admits his dissatisfaction with such reasons.

To address the issue of interdependence of competition theories and the regulation of competition, one has to look into the history of economic thought. Starting from the classical perspective, one can distinguish two major streams of thought: *laissez-faire* doctrine and classical economics following the works of Adam Smith. The former proclaimed the economy free from any state intervention – naturally any competition regulation stands in contradiction with such a principle. The latter was more hesitant on the idea of free and unconstrained trade. Adam Smith regarded monopolies as a hindrance for the economy and acknowledged that their actions, being an increase of prices above their natural level, "raise their emoluments, whether they consist in wages or profit, greatly above their natural rate" [Smith 1801, p. 62]. He also identified the problem of cartels, but did not advise any legal measures against them, limiting his recommendation for the state, only to not "facilitate such assemblies" [Smith 1801, p. 132]. Further however, he neglected the topic and made no other important remarks about monopolies. David Ricardo, allegedly, had "never given a vote in favour of monopoly in his life" [Stigler 1982, p. 2], whereas John Stuart Mill recognized that limited numbers of participants obstructs competition; however, he did not mention any remedies, other than governments restraining from the creation of monopolies [Mill 1857, p. 176]. To summarize, classical economists started to acknowledge the impact of market power of companies on the markets, but saw no need to regulate it in any way, other than restraining from facilitating it.

The end of the 19th century brought revolution in economics. The topic of competition became more important; however, studies of the time were not cohesive with the Sherman Act. At the turn of the 19th and 20th century, economists tended to praise the benevolent effects of competition, regarded as rivalry and entrepreneurship. Between 1885 and 1920 one can find many theoretical publications that analysed competition and related topics. Ely [1900]; Clark, Giddings [1888], and others discussed the size of companies and the impact of the scale of production. Their conclusion was that there might be competition between large companies despite the fact that larger companies on the market implicate a smaller number of them. They believed that such rivalry will cause an increase in output and benefits for the buyers.

Some economists were involved in the analysis of price competition. On the one hand, they perceived reductions of price as an important tool of rivalry that might lead to some benefits for the consumers [Clark, Giddings 1888, p. 6]. On the other hand, they understood that rivalry in a form of price decreases might end up with cut-throat competition. But, unlike today, when cut-throat competition is perceived as a phenomenon that might lead to the monopolization and losses for the companies involved, they thought that the lack of rivalry is a solution. It was believed that antitrust legislation indirectly forcing price competition caused serious inefficiencies in the markets – in this situation the monopoly was a necessity [Fisher 1916, p. 332].

Profits in that time were perceived as a competitive activity [Clark, Giddings 1888, p. 49]. Other scholars supported those claims stating that profits are connected with change and serve as indicators for the rivalling activities [Seager 1917, p. 211]. It was perceived that high profits, being a result of prices higher than "the levels necessary to cover their outlays with normal profits" [Marshall 1919, p. 397], will encourage entry. Capital markets, in their opinion, did not pose any barrier to entry, as the capital can readily be raised [Ely 1900, p. 178].

Those examples are overwhelming. In times when the antitrust law in the US had been created, most prominent economists regarded such efforts rather coldly. Despite the fact that then opinions on competition as a rivalry did not necessarily mean opposition towards antitrust law, it surely contributed to aloofness from legislator's efforts.

The year 1920s brought a change in the outlook on competition. With Knight's [1921, pp. 51-93] complete formulation of the concept of perfect competition there came a transformation of opinions. Before 1920, competition was almost invariably associated with the rivalry. After the formulation of perfect competition model a shift from the analysis of actions associated with the verb "to compete" towards the analysis of the properties of equilibrium became evident. One might even state that the modern meaning of competition has nothing to do with rivalry. Perfect competition is a situation where business rivalry is almost non-existent, maybe limited only to costs.

With the development of perfect competition, economists started to perceive this model as a starting point in their theoretical analyses. Moreover, perfect competition became a benchmark in the welfare analysis, that eventually lead to the series of conclusions that imperfectly competitive markets, where companies are able to exert pressure on prices due to their market power, create welfare losses for the economy. However, it has to be noted that some schools of economic thought, through the rejection of the perfect competition model as unreal and static, reject also competition regulation. This is particularly true for the Austrian School, according to which, put simply, all business practices provide benefits for the consumers. Nonetheless, the acceptance of antitrust regulation among economists came 30 years after its introduction. And it was not absolute.

3. Second example: the idea of relevant market

When students begin their journey with economics, they might encounter one very perplexing problem: How should one define the market? Until the 1980s economists paid no special attention to a definition of the market. The result of this was that in each and every economic textbook there was a different market definition. Moreover, in economic studies, the definitions used were created depending on the purpose of the research and the delimitation of the market were repeatedly done *ad hoc*. Coase writes: “Although economists claim to study the working of the market, in modern economic theory the market itself has an even more shadowy role than the firm” [Coase 1988, p. 7]. Such strong words debase the role of economics and economists in modern society. How can economic studies be relevant, essential and important, if economists cannot clearly define one of the basic ideas underlying the economy, one might ask.

Contemporary market definition include such attributes as: area (real or virtual); parties, buyers, sellers; transactions, goods, price, exchange, equivalent, amount; environment, rules, institutions, and many others. Using such elements, one can easily create his or her own market definition; however, such a definition might not be useful because it does not include any methodology of market delimitation. Why is that important? In many antitrust cases it is market definition that solves the argument. Imagine some company accused of monopolistic practices. Such a company would gladly define the market in as broad and general terms as possible – it would be therefore possible to show many other companies that might be perceived as competitors to the company in question, dismissing accusations. Inversely, prosecutors would like to define the market as narrow as possible – in such a case it would be easier to substantiate the indictment. Stigler said in his Richard T. Ely lecture: “My lament is that this battle on market definitions, which is fought thousands of times what with all the private antitrust suits, has received virtually no attention from us economists. Except for a casual flirtation with cross elasticities of demand and supply, the determination of markets has remained an undeveloped area of economic research at either the theoretical or empirical level” [Stigler 1982, p. 9].

From the point of view of any antitrust law the market definition is crucial. The battle that Stigler was referring to is the battle of lawyers to ascertain how markets can be defined. For the purpose of the competition policy disputes to define the market would be to answer the following question: Which products are such close substitutes, that they operate as competitive constraints on the actions of their producers? [Jones, Sufrin 2008, p. 60].

The Supreme Court of the United States decided in 1956 in the case about cellophane produced and sold by du Pont [United States v. E.I. du Pont 1956]. However, the ruling in this case is widely regarded as a mistake. Du Pont had been accused of monopolistic practices while selling cellophane and cellophane products. At the time however, crude analytical methods brought a conclusion that cellophane had a lot of substitutes; therefore, it was impossible for du Pont to exert power in order to increase prices. The Court however failed to observe that the price of cellophane at the time were already so high that it was impossible for du Pont to increase the price even further, as buyers resorted to inferior substitutes (paper, for example). This was the situation in which the Court studied if du Pont had the power to increase the price from its current level, after it had already been increased to the maximum level acceptable by the buyer and maximizing profit. There could be the only one result – du Pont was acquitted. If the market were defined properly, limited only to the cellophane (not as in the ruling, including also other packaging materials), du Pont would rightfully be sentenced and fined.

The first concepts of proper and strict market definitions were started in the middle of the 1950s. Stocking, Mueller [1955] were probably the first ones to ask the question about market delimitation, arguing about the aforementioned cellophane case and pointing out possible mistakes of the courts. The questions posed by them did not change the final ruling of the Supreme Court (the case started in 1947 and went through several stages), which was praised as an example of the fairness of the law. In 1959 Adelman suggested the first comprehensible solution for market delineation [Adelman 1959]. Until 1970s his idea was not taken further. In 1977 Sullivan wrote: "Market definition is not a jurisdictional prerequisite, or an issue having its own significance under the statute; it is merely an aid for determining whether power exists. To define a market in product and geographic terms is to say that if prices were appreciably raised or volume appreciably curtailed for the product within a given area, while demand held constant, supply from other sources could not be expected to enter promptly enough and in large enough amounts to restore the old price or volume. If sufficient supply would promptly enter from other geographic areas, then the "defined market" is not wide enough in geographic terms; if sufficient supply would promptly enter in the form of products made by other producers which had not been included in the product market as defined, then the market would not be wide enough in defined product terms. A "relevant market," then, is the narrowest market which is wide enough so that products from adjacent areas or from other producers in the same area cannot compete on substantial parity with those included in the market" [Sullivan 1977, p. 41].

With the work of Sullivan the studies on a relevant market have begun. Areeda and Turner point out that in "economic terms a 'market' embraces one firm or any group of firms which, if unified by agreement or merger, would have market power in dealing with any group of buyers" [Areeda, Turner 1978, p. 347]. In the 1978 publication of the Department of Justice, it is possible to find the first formulation of the relevant market delineation methodology, something that later was called "hypothetical monopolist test". This quoted passage was written by Gregory J. Werden [see Werden 2003]: "A geographic market, for antitrust purposes, is an area within which the sellers of a product could maintain significantly higher prices if they combined to form a monopoly. Generally speaking, the smaller the area encompassed by the market, other things being equal, the more likely it is that buyers within the area will be able cheaply to import the product from sellers outside the area. This puts a limit on how much the hypothetical monopoly within an area could raise prices. If an area is so small that the combined sellers within it could achieve only a trivial price increase, then the area is not a market. … The same principle governs product markets, but instead of a geographic area it is a range of goods that are included in the product market. If it is not very costly for buyers in some geographic area to substitute among similar goods, say among different grades of coal, then a broad range of coal grades would be required to comprise a product market. This is because producers of narrower ranges of grades, if combined as a monopoly, would not be able to maintain significantly higher prices for their ranges of grades, or products" [United States Department of Justice 1978].

It is important to indicate that all of the aforementioned academics were legal scholars. None of the economists provided important input into the relevant market methodology. In 1982 the United States Department of Justice guidelines introduced market delineation method dubbed the SSNIP test.[3] The test was introduced officially in the EU in 1997.

Even now, after almost 30 years of worldwide implementation, the concept of relevant market is not regarded by economists as valuable and useful. Some of us still prefer to use *ad hoc* definitions and delineate a market without regard for its relevancy.

4. Concluding remarks

The two examples presented in this paper are only the proverbial tip of the iceberg. But those examples show one, very significant phenomenon – economic theories seem to fall behind the regulation of competition. It looks peculiar that the science

[3] "A market is as a product or group of products and a geographic area such that (in the absence of new entry) a hypothetical, unregulated firm that made all the sales of those products in that area could increase its profits through a small but significant and nontransitory increase in price (above prevailing or likely future levels)" [United States Department of Justice 1982].

which analyses and describes such phenomena as competition and exchange is hesitant with the realization of its theories. In many cases competition regulation could benefit from the theoretical approaches as means of its substantiation or even explanation. But no, it is not possible and the problem lies in the fact that current theories provide, in many cases, inadequate methodology to explicate the phenomenon in question.

Economists take inspiration from the empirical data; therefore, they usually analyse the occurring phenomena *ex post*. Economics reacts insufficiently quickly to the needs of the "market for institutions". It is possible to come up with two possible results of such a cautious attitude in the matter of competition regulation. Firstly, refraining from putting forward hasty conclusions and proposing half-baked and untested regulations might provide benefits for the economy if the faulty law is not introduced. Secondly, however, antitrust law is introduced by legislators and judges. If their actions are not sufficiently scrutinized, the implementation of faulty law might becomes a fact. Some institutions might be introduced hastily and therefore diminish welfare, instead of increasing it. Defects might spread through the typical legal way of thinking by analogy, extrapolating present institutions without questioning them. The final conclusion is a grave one: the current institutional order in the field of antitrust might be the result of multiplied errors.

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WSPÓŁZALEŻNOŚĆ TEORII KONKURENCJI I REGULACJI KONKURENCJI. KONTEKST HISTORYCZNY I JEGO IMPLIKACJI DLA ZMIANY INSTYTUCJONALNEJ W DWÓCH PRZYKŁADACH

Streszczenie: Niniejszy artykuł analizuje związki pomiędzy ekonomicznymi teoriami konkurencji i praktyką prawa antymonopolowego. Głównym celem artykułu jest przeanalizowanie historycznego następstwa teoretycznych odkryć ekonomistów a decyzjami sędziów i jurorów w sprawach antymonopolowych. Główną hipotezą jest stwierdzenie, że ekonomia zaniedbuje potrzeby organów antymonopolowych i zazwyczaj analizuje wprowadzane mechanizmy *ex post*. Hipoteza ta jest uprawdopodobniona w dwóch przykładach: wprowadzenia i uzasadnienia Ustawy Shermana oraz analiz rynków właściwych, czynionych podczas wielu spraw antymonopolowych.

Słowa kluczowe: prawo antymonopolowe, konkurencja, ekonomiczne teorie konkurencji, Ustawa Shermana, rynek właściwy.