CRITICAL ANALYSIS OF THE EUROPEAN COMMISSION'S AND THE TURKISH COMPETITION AUTHORITY'S APPROACHES TO THE TYING AND BUNDLING PRACTICES OF DOMINANT UNDERTAKINGS

Cihan DOGAN and Ceren USTUNEL

Master Degree in Specialized Economic Analysis
Barcelona Graduate School of Economics
2016

Table of Contents

ABSTRACT

Critical Analysis of the European Commission's and the Turkish Competition Authority's Approaches to the Tying and Bundling Practices of Dominant Undertakings
Supervisor: Anna Merino Castelló

The regulatory agencies have a tendency to adopt a conservative approach when it comes to the tying and bundling practices of the dominant undertakings due to their potential exclusionary effects. However, competition policy norms are strongly rooted in the economics and an interpretation of such norms without sufficient economic analysis can lead to incorrect assessments since tying and bundling practices have the potential to be used solely for the efficiency-oriented purposes and thus the regulatory agencies need to clearly understand the commercial and strategic motives for such practices. Whereas we conclude that the most prudent approach to the tying and bundling practices of the dominant undertaking is the Rule of Reason approach, we further conclude that such approach may not be the most appropriate approach in cases where the dominant firm uses tying and bundling practices as a way to introduce innovation into the market.

ÖZET

Avrupa Komisyonu ve Türk Rekabet Kurumu'nun Hakim Durumdaki Teşebbüslerin Bağlama ve Paket Satış Uygulamalarına Yönelik Yaklaşımlarının Kritik Analizi
Danışman: Anna Merino Castelló

Düzenleyici kurumlar, potansiyel dışlayıcı etkileri sebebiyle hâkim durumdaki teşebbüslerin bağlama ve paket satış uygulamalarına yönelik olarak tutucu bir yaklaşım sergilemektedir. Hâkim durumdaki teşebbüslerin, bağlama ve paket satış uygulamalarını salt etkinlik kazanımı amacıyla kullanma motivasyonunun da bulunabileceği için, düzenleyici kurumların bu tür uygulamaların temelindeki ticari ve stratejik motivasyonları dikkatli bir şekilde ele alması gerektiği açıktır. Nitekim rekabet politikası normlarının güçlü ekonomik temellere dayandığı ve yeterli ekonomik analizler olmadan söz konusu normların yorumlanmasının yanlış değerlendirmelere sebep olacağı aşikardır. Bu doğrultuda çalışmamızda, hâkim durumdaki teşebbüslerin bağlama ve paket satış uygulamalarının muhakeme kuralı (*Rule of Reason*) çerçevesinde değerlendirilmesinin en makul yaklaşım olacağını düşünmekteyiz. Bununla birlikte hâkim durumdaki teşebbüslerin bağlama ve paket satış uygulamalarını, pazara yenilik sunma motivasyonuyla kullandıkları durumlarda ise, muhakeme kuralının en sağlıklı yaklaşım olmayabileceği düşünülebilecektir.

Acknowledgement

We would like to express our sincere gratitude to our directors Juan-Jose Ganuza and Massimo Motta for their continuous support for our study and research at Barcelona GSE. We also would like to express our gratitude to the Jean Monnet Scholarship program for their kind support.

Critical Analysis of the European Commission's and the Turkish Competition Authority's approaches to the tying and bundling practices of dominant undertakings

The aim of this paper is to critically analyze the approaches of the European Commission ("***Commission***") and the Turkish Competition Authority ("***Authority***") to the tying and bundling practices of the dominant undertakings.

Introduction Section provides a brief description of tying arrangements, its pricing strategies and types. We also mention the relevant commercial practices having the potential of similar effects from an economics point of view.

In Section II, we introduce the intuition of tying and bundling practices and economic theory of harm. In particular, we present Structure-Conduct-Performance Paradigm (SCP Paradigm) of Harvard School's theorist and Single Monopoly Profit Theory of Chicago School theorist.

Section III focuses on the undertakings' incentive for tying arrangements. In this regard we emphasize the pro-competitive effects of tying arrangements which favor the price differentiation, economies of scale, decrease in transaction and search costs, prevention of double-marginalization and assurance of product quality.

In Section IV, we examine the elements of tying arrangements and address to the (i) existence of two distinct products and relevant economic test for detection (ii) coercion of buyers and (iii) anticompetitive foreclosure together with potential justifications.

In Section V, we propose empirical analysis of major case law of the European Commission and the Turkish Competition Board ("***Board***")[1] in an attempt to shed light on their approach to the tying arrangements of dominant undertakings.

[1] The Turkish Competition Board is the decision-making body of the Turkish Competition Authority.

In Section VI, we conclude by suggesting a methodology for dealing with the assessment of the tying and bundling practices of the dominant undertakings.

1. Introduction

"*Every person who sells anything imposes a tying arrangement. This is true because every product or service could be broken down into smaller components capable of being sold separately, and every seller either refuses at some point to break the product down any further or, what comes to the same thing, charges a proportionality higher price for the smaller unit.*[2]*"*

Tying and bundling are widespread commercial practices bearing the risk of anticompetitive effect specifically when the firm has market power. Still, economic theory proposed that tying arrangements may promote productive efficiencies and therefore increase the consumer welfare in many cases. Before delving into the theory of harm associated with tying arrangements and potential economic incentive of firms, it would be prudent to provide brief description of these arrangements and their types.

Whereas tying generally refers to a situation where customers intend to buy one product (the tying product) are required also to purchase another product (the tied product) by the dominant seller, bundling refers to a situation where the dominant seller offers two or more products jointly[3]. To illustrate, whereas the producer of products A and B can offer the products as "{A}", "{B}", perceived as stand-alone sale, the producer can offer the products as "{A, B}" or "{B}" well-known as tying arrangement. Tying arrangements might be enforced through contracts or technical specifications. In cases where the supplier of a product contractually obliges a buyer to buy also another product from the supplier, the contractual tying arise (photocopy machine and toner). In

[2] Bork, Robert H. *The Antitrust Paradox: A Policy at War with Itself* (Basic Books, 1978, reprinted by The Free Press, 1993) at 378-379.
[3] Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings para.48

cases where the two products are designed to work solely altogether, the technical tying arises (photocopy machine only works with specific toner)[4].

Pure bundling occurs in cases where neither of products can be purchased individually, though can be bought only as part of the bundle. Mixed bundling (multi-product rebate) refers to the practice of selling each product both individually and also as part of the bundle. To illustrate, in cases where the producer offers the products only as part of a bundle "{A, B}", this arrangement is considered as pure bundling. However, in cases where the producer offers the products individually and also as part of a bundle illustrated as "{A, B}" or "{A}" or "{B}", this arrangement is perceived as mixed bundling[5].

In mixed bundling, the bundle price must be sufficiently lower than the sum of the individual prices of the products so that it can induce buyers to remain loyal to the seller. This feature could be observed in volume-based rebates as well, especially when the buyer benefits from lower the price by changing incremental purchases from another seller. From an economics perspective, bundling and volume based rebates have the same effect on the assumption that the lower prices for one product (tying product) are only available to the loyal customers who buys the second (tied) product. Accordingly, in theory, volume based rebates have the same potential with tying and bundling arrangements in order to enhance or diminish the consumer surplus and total welfare[6].

Refusal to deal also shares the common notion with tying and bundling arrangements in terms of suppliers' incentive to refuse to sell its product separately. In bundling arrangements, the buyer is refused to buy the tying product without tied product. Equivalently, when the seller offers the products as a bundle, the buyer is refused from

[4] The Unilateral Conduct Working Group, International Competition Network, Unilateral Conduct Workbook Chapter 6: Tying and Bundling, Presented at the 14th ICN Annual Conference Sydney, Australia April, 2015 p.16-17

[5] Robert O'Donoghue and Jorge Padilla, The Law and Economics of Article 102 TFE, Second edition, Hart Publishing 2013 p. 596-597.

[6] Patrick Greenlee, David Reitman, and David S. Sibley, An antitrust analysis of bundled loyalty discounts Economic Analysis Group Discussion Paper October 2004

purchasing the individual components of the bundle[7]. Therefore, the very nature of the bundling arrangements incorporates a refusal to deal by definition.

2. Theory of Harm Associated with Tying Practices

The regulatory agencies around the world gradually started to adopt the economics-based approach to the application of competition policy norms. This also serve as a substitute for form-based approach, which in general does not require assessing the true impact of a certain behavior on consumers, competitors and market. Tying and bundling arrangements are one of the most suitable types of potential abuses, which necessitate an understanding of economic approach to the competition policy norms. Consequently, the *per se* approach to the tying and bundling arrangements has gradually been replaced by the *rule of reason*, which requires a more economic analysis along with an evaluation of potential impact of a particular conduct on the market[8].

To begin with old school approach, SCP Paradigm of Harvard School basically claims that the market structure determines the firm's conduct and firm's conduct determines the market performance of the firm. This paradigm further asserts that the dominant firms active in highly concentrated markets have stronger incentive to use tying and bundling arrangements in an effort to leverage their market power into other competitive markets. This in turn leads to poor economic performance through price discrimination and increasing entry barriers[9]. Needless to say, the SCP paradigm of the Harvard School is eventually strengthened by the adoption of *per se* approach towards the tying and bundling arrangements of dominant undertakings[10].

---

[7] Even though tying and bundling practices are similar to refusal to deal or predatory pricing from an economics point of view, the Regulatory agencies tend to have a different evaluation approach against both types of abuses. Whereas the regulatory agencies require an essentiality condition for the refusal to deal, such condition is not needed for the tying and bundling practices. Since this is not the main focus of this paper, we will not delve into the details of such issues.

[8] Iwo Małobęcki, *Per se approach v. Rule of reason. Tying and Bundling in European Competition Law – a legal and economic analysis* accessed at < http://lawandeconomics.pl/wp-content/uploads/2011/05/3PLEC_Malobecki_full.pdf>

[9] J. P. Choi , *Recent Developments in Antitrust- Theory and Evidence*, Massachusetts Institute of Technology Press 2007, p. 62.

[10] Iwo Małobęcki, *Per se approach v. Rule of reason. Tying and Bundling in European Competition Law – a legal and economic analysis* accessed at < http://lawandeconomics.pl/wp-content/uploads/2011/05/3PLEC_Malobecki_full.pdf>

The *per se* approach was criticized by Chicago School theorists, who believe "*competition law's mission is to preserve, improve and reinforce powerful economic mechanisms that compel businesses to respond to the consumers*[11]". Therefore, the Chicago School theorists defend that the ultimate goal of consumer welfare could only be achieved through the efficiency gains by maximizing the benefit of the economic resources, which also satisfy the need of as much consumers as possible[12]. According to Chicago School antitrust scholars including Posner, Easterbrook and Bork, tying and bundling arrangements should be considered *per se* legal and an antitrust interference should be made under exceptional circumstances[13].

According to Single Monopoly Profit Theory, a firm, which already has a monopoly power in one market, is not able to increase its profit by monopolizing another market through tying and bundling arrangements. However, it does not necessarily mean that a monopolist would not engage in tying and bundling practices for higher profit but rather suggests that a monopolist can increase its profit only if it is able to improve quality or lower the costs through tying and bundling[14]. Padilla explains the intuition as follow: Assuming that (i) the quantity demanded by consumers of A and B is independent from each other, (ii) there is unit demand for A and B, and (iii) A and B are produced at constant marginal cost c_A and average costs c_B. The monopolist undertaking in the market for product A may offer the product A at a price of full valuation v_A. The same monopolist may offer A and B as a bundle at a price of p_{AB}. So, the implied price of B would be equal to $p_{AB} - v_A$. In order for bundle to sell, the implied price of B ($p_{AB} - v_A$), needs to be lower than the competitive price in the market for B (c_B). According to this assumption, consumers receive zero utility from A because the price is equal to the consumers´ valuation. Accordingly, the only way to increase consumers' utility of buying the bundle is to purchase B cheaper than to purchase it separately. Setting the price of B lower than the competitive price would actually lower the monopolist´s

[11] R. H. Bork, The Antitrust Paradox: A Policy with War at Itself, New York 1978, p. 90.
[12] Posner R.A. Antitrust Law, University of Chicago Press 2001, p. 24-25.
[13] Posner, R. A. Antitrust Law: An Economic Perspective 1976 Chicago: Chicago University Press.
Posner, R. and Easterbrook, F. 1981. Antitrust Cases, Economic Notes, and Other Materials (2nd edn). St Paul, MN: West Publishing Co. Bork, R. 1978. The Antitrust Paradox. New York: Free Press.
[14] Robert O'Donoghue and Jorge Padilla, The Law and Economics of Article 102 TFEU (2nd edn, Hart 2013) p. 602-603.

profit, therefore the monopolist would have no incentive to bundle. However, in cases where the demand for the products A and B are complementary and they are consumed with a fixed ratio (this theory would not hold if the products are consumed in variable proportions), the dominant undertaking can only benefit if the tied product is competitively supplied. This is because the monopoly profit in both of the market can be captured through a monopoly in one of the complementary markets[15].

Economists, who do not entirely agree with Chicago School's approach, claim that dominant firms can use tying and bundling arrangements in an attempt to leverage the market power and eliminate the competition. They further claim that Single Monopoly Profit Theory is solely holds under certain restrictive assumptions such as consumers' using fixed amount of tied and tying products or demand for the two product having a strong positive correlation[16].

Another criticism is a monopolist would not be able to extract the entire consumer surplus from each consumer through price discrimination in the absence of tying [17]. It should also be emphasized that in cases where tying and bundling practices leads to foreclosure of a substantial part of the market, which in turn increases the market power of the dominant firm, the dominant firm could have incentive to exploit such market power through certain practices [18]. In any case, it is quite clear for most of the economists, including the ones who criticize Chicago School's approach, that tying and bundling arrangements can generate both positive and negative effects and therefore the final assessment needs to be made based on the specific dynamics of the particular case[19].

---

[15] Robert O'Donoghue and Jorge Padilla, The Law and Economics of Article 102 TFEU (2nd edn, Hart 2013) p. 603.
[16] E. Elhauge, Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory, Harvard Law Review, Vol. 123, No. 2, December 2009, p. 400.
[17] Economides, N. 2012. Tying, bundling, and loyalty/ requirement rebates. In Research Handbook on the Economics of Antitrust Law, ed. E. Elhauge. London: Edward Elgar
[18] Elhauge, E. 2009b. Tying, bundled discounts, and the death of the single monopoly profit theory. Harvard Law Review 123, 397.
[19] Iwo Małobęcki, *Per se approach v. Rule of reason. Tying and Bundling in European Competition Law – a legal and economic analysis* accessed at < http://lawandeconomics.pl/wp-content/uploads/2011/05/3PLEC_Malobecki_full.pdf>

Numerous theorists have shown that the approach to the tying and bundling practices of dominant undertakings has been evolved from *per se* approach to the *rule of reason* by time. Still, theory of harm associated with tying and bundling arrangements maintains its importance in antitrust, therefore we analyze under this Section briefly.

Tying arrangement of dominant firms can lead to exclusion of competitors, facilitate cartel arrangements and ease the surplus transfer from consumers to firms. Since the theory of harm associated with the exclusion of rivals prevails over others, a special emphasize needs to be made to the foreclosure effect of the tying practices.

Exclusion of competitors[20] occurs where the tying firm leverages its market power in the market for the tying product into the market for the tied product. This aims to decrease the competition in the tied product market by preventing competitors from making sales, which could have been achieved in the absence of tying practice. The dominant undertaking can extract a second monopoly profit from the tied market through successful exercise of its market power[21].

Foreclosure analysis of tying and bundling by dominant firms requires a special attention. In each case, every specific dynamic should be evaluated with a special emphasize on economic rationale. Particularly (i) market power of dominant undertaking, (ii) duration of tying and bundling arrangements and (iii) scope of tied market needs to be taken into the consideration in order to decide whether there is an abuse or not.

[20] It should be emphasized that not all kinds of foreclosure has negative effect on the market but only the anti-competitive foreclosure where effective access of actual or potential competitors to supplies or markets is hampered or eliminated by the tying conduct of the dominant firm, would have an adverse effect on consumer welfare through higher prices, lower quality or choice (Guidance para 19). The risk of anti-competitive foreclosure would be higher in cases where the tying practice is applied for a long period and it is costly for consumers to switch suppliers in order not to purchase tied product. In cases where the demand for the tied product is limited and the dominant firm is able to extract all the demand for the tied product through leveraging its market power in the tying product, the anti-competitive foreclosure of the competitors in the tied market would be more likely.

[21] Crane, Daniel A. "Tying and Consumer Harm." Competition Pol'y. Int'l. 8, no. 2 (2012)

3. The economics of firms' incentive for tying

According to economic theory, tying and bundling arrangements might have both anticompetitive and pro-competitive effects, therefore a detailed factual investigation is required in order to evaluate dominant firms' practices[22].

Contrary to general belief, unilateral conducts of dominant firms usually intensify competition. This is because they create efficiencies through offering improved integrated products, preventing free-riding or double marginalization or intensifying non-price competition[23].

Even though there might be anticompetitive effect of tying and bundling arrangements, the incentive of dominant firms can be based on numerous economic reasons, particularly efficiency gains and increase in demand. Specifically, the division of labor and scale economies suggests that it might be more efficient to sell certain components together rather than marketing separately. Tying different products may also address the information asymmetry problem as well. To illustrate, the seller of A knows which products in the market work efficiently with A, therefore this would lead customers to enjoy best possible quality of products that they purchase in a bundle[24].

Price differentiation

Strategic usage of tying and bundling arrangements serve as instruments for price differentiation. This is through sorting customers into different groups with reservation price characteristics, which consequently extract the consumer surplus[25]. Since each buyer has a different valuation of a given product, applying different pricing policies for different buyers can increase the demand for a given product. In cases where the seller

[22] Robert O'Donoghue and Jorge Padilla, The Law and Economics of Article 102 TFEU (2nd edn, Hart 2013) p. 599.
[23] Zenger, Hans and Walker, Mike, Theories of Harm in European Competition Law: A Progress Report (February 22, 2012). TEN YEARS OF EFFECTS-BASED APPROACH IN EU COMPETITION LAW, Jacques Bourgeois and Denis Waelbroeck, eds., pp. 185-209, Bruylant, 2012.
[24] Motta, Massimo, Competition Policy: Theory and Practice. Cambridge University Press 2004 Cambridge p. 460-461.
[25] Adams, W. J. and Yellen, J. L. 1976. Commodity bundling and the burden of monopoly. Quarterly Journal of Economics 90, 475-476

is not able to implement perfect price discrimination among buyers who differ in willingness to pay, the seller can use tying arrangements in order to extract more or all the surplus for its product[26]. This would allow the seller to increase the demand of a certain product.

It should be emphasized that price differentiation is an economic concept, which also includes the price discrimination (applying dissimilar conditions to equivalent transactions with other trading parties beyond any justification). However, unlike the price discrimination, not all kinds of price differentiation are considered as anti-competitive[27]. Printer would be a good example of such price differentiation. There are people who have high willingness to pay for printer since they use frequently and there are people who have less willingness to pay for printer since they use rarely. If the seller price low for printer, then everyone would buy because their willingness to pay is higher than the price, however people who have high willingness to pay would pay less. If the seller price high for printer, then people who has less willingness to pay would not buy. This would reduce the demand for printer as well. Therefore, the best commercial strategy is to tie the sale of printer to the sale of cartridge. In order to ensure that people who use printer more will pay more and who use printer less will pay less, the seller should lower the price for the printer and higher the price for the cartridge. Obviously, the seller could apply price differentiation through tying and bundling arrangements in such case.

Economies of Scale

Tying and bundling arrangements may lead to both economies of scale and economies of scope on the production, marketing and distribution of a given product. To illustrate, the machines used in factories can be used to produce more than one product. In such case the producer could have the possibility to lower the size and complexity of their factories. Moreover, using specialized labor helps producers to combine the different

[26] Nicholas Economides - Palgrave Macmillan, Bundling and Tying accessed and available at <http://www.stern.nyu.edu/networks/Economides_Bundling_and_Tying.pdf>
[27] Karakilic Hasan, *Rekabet Hukukundan Baglama Uygulamalari* – Tying Arrangements under Competition Law XII Levha Pub. 2013 p. 26-36

products that are part of the tie or bundle more efficiently than end users[28]. The seller simply lowers its costs for marketing, administrative, and distribution of products through tying and bundling compared to launching them separately. Moreover, when products offered as a single package, the costs associated with the warehouse space and packaging material might be lower as well[29].

Decrease in transaction costs and search cost

The seller may reduce its transaction costs, which pass on to the buyers, through joint production and sale. This is in line with Chicago School's pro-competitive arguments that tying and bundling arrangements has the potential to decrease the cost associated with the most appropriate and efficient combination of the products. The ultimate combination perfectly satisfies the customer need as well. This especially will be the case where the products tied are complementary since such practice gives assurance in terms of the coordination and efficiency of the tied products[30].

Double Marginalization (Cournot)

A firm has a monopoly power over the two complementary product would have incentive to charge a lower price than two separate monopolists each selling a different product. This is because the monopolist with two complementary products would consider the positive effect of the complementary product on individual demands of each product. However, a single product monopolist ignores such externality[31]. This effect can also be observed in the analysis of vertical agreements or mergers with

[28] Ahlborn, Christian, Evans, David S., and Padilla, A. Jorge 'The Antitrust Economics of Tying: A Farewell to *Per se* Illegality', *Antitrust Bulletin,* Spring-Summer 2004
[29] The Unilateral Conduct Working Group, International Competition Network, Unilateral Conduct Workbook Chapter 6: Tying and Bundling, Presented at the 14th ICN Annual Conference Sydney, Australia April, 2015 para.31
[30] The Unilateral Conduct Working Group, International Competition Network, Unilateral Conduct Workbook Chapter 6: Tying and Bundling, Presented at the 14th ICN Annual Conference Sydney, Australia April, 2015 para.31-32
[31] A Cournot, Recherches sur les Principes Mathématiques de la Théorie des Richesses, Hachette (1838)

double marginalization problem and with the same token, complementary products would be priced lower in cases where such products are part of the same bundle[32].

Assurance of quality through tying and bundling

Economic theory suggests that tying and bundling arrangements can be effectively used when the products are complementary by nature. Furthermore products, which are served as bundles, often work together more effectively[33]. Since the price of the tying product is often higher than the tied product, in an effort to protect its brand quality of the first product, the sellers have incentive to force the buyers to purchase the bundle of the complementary products[34]. In such cases the bundle of the complementary products can create a value, which is higher than the sum of the values that the products create individually.

4. The elements of tying[35]

There are contradictory opinions on elements of tying practices. However, for the purpose of this paper, we will examine only three of them.

4.1 Tying and Tied Product's being distinct products

One element of tying arrangement is having separate distinct products. The distinction between the tying and tied product plays a crucial role for the assessment of possible anti or pro-competitive effects of these arrangements.

[32] Robert O'Donoghue and Jorge Padilla, The Law and Economics of Article 102 TFEU (2nd edn, Hart 2013) p. 601-602
[33] Hal R. Varian Intermediate Microeconomics 8th. Edition p.474
[34] Karakilic Hasan, *Rekabet Hukukundan Baglama Uygulamalari* – Tying Arrangements under Competition Law XII Levha Pub. 2013 p. 42-43
[35] Since the competition policy norms regulating the competition policy regime in Turkey are quite similar to the norms in Europe, we find it prudent not to make any emphasize on the comparison on the norms.

4.1.1 Two distinct product

In general, there should be at least two distinct products in order to discuss tying or bundling arrangement. The features of the products and formation of the bundle is significant in order to make a competitive analysis and quantify the effects on consumers.

- *Commission's approach*

According to the Commission, the products are considered as being tied within the meaning of Article 102(d) of TFEU, in cases where the products do not have any connection by their nature or commercial usage. Commission's approach in this regard is clearly stated within the scope of the Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings ("***Guidance***") [36]. According to the Commission's Guidance, customer demand is the main criteria in order to evaluate whether the products are distinct or not. Therefore, if there exist a separate sufficient demand for the tying product in the absence of tying or bundling arrangements, then the Commission considers that the products are distinct. It is important to note that the demand should be sufficient enough for suppliers in order to produce both products stand-alone[37].

- *Authority's approach*

The Turkish Competition Authority shares the same approach with the Commission which prioritizes customer demand. This is explicitly revealed by the Authority's Guidelines on the Assessment of Exclusionary Abusive Conduct by Dominant

[36]Case T-201/04 Microsoft v Commission [2007] ECR II-3601, paragraphs 917, 921 and 922: Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings.

[37] Guidance, para.51. *"Whether the products will be considered by the Commission to be distinct depends on customer demand. Two products are distinct if, in the absence of tying or bundling, a substantial number of customers would purchase or would have purchased the tying product without also buying the tied product from the same supplier, thereby allowing stand-alone production for both the tying and the tied product".*

Undertakings ("***Authority's Guideline***") [38]. According to the Authority's Guidelines, there should exist a significant portion of customers who would purchase or would have purchased the tying product stand-alone in the absence of the tying arrangement. Furthermore, the Board is allowed to use any direct or indirect evidence which show that the customers choose to buy the products separately or there is a specialized production or sales attributed to tied product solely[39].

4.1.2 Tests for determining the two distinct products

Economists predominantly use two main tests in order to determine whether the two products are distinct or not. They are are separate customer demand test and the customary commercial practice test.

Separate customer demand test focuses on to find out whether there is separate customer demand for the tied or bundled product. The important feature of this test is whether the customers perceive the products as differently and whether there is still demand in the market for the tied product despite of the tying and bundling arrangements. The test basically examines whether there is sufficient demand to buy the products separately from different sellers, and in such case, the tying and bundling arrangements are considered as non-problematic[40].

According to Paragraph 51 of the Commission's Guidance "*Whether the products will be considered by the Commission to be distinct depends on customer demand. Two products are distinct if, in the absence of tying or bundling**, a substantial number of customers** would purchase or would have purchased the tying product without also buying the tied product from the same supplier, thereby allowing stand-alone*

[38] Authority's Guidelines on the Assessment of Exclusionary Abusive Conduct by Dominant Undertakings.

[39] Authority's Guideline, para. 86-87, *"(...) If, in the absence of the tying practice, a significant portion of the customers would purchase or would have purchased the tying product without purchasing the tied product, the Board considers these products to be distinct. When determining whether the tied and tying products are distinct, the Board may use direct evidence showing that customers buy the products separately when given a choice, or it may use indirect evidence such as the presence of undertakings in the market which are specialized in the production or sales of the tied product without the tying product."*

[40] Karakilic Hasan, *Rekabet Hukukundan Baglama Uygulamalari* – Tying Arrangements under Competition Law XII Levha Pub. 2013 p. 60-63

production for both the tying and the tied product. Evidence that two products are distinct could include direct evidence that, when given a choice, customers purchase the tying and the tied products separately from different sources of supply, or indirect evidence, such as the presence on the market of undertakings specialized in the manufacture or sale of the tied product without the tying product or of each of the products bundled by the dominant undertaking, or evidence indicating that undertakings with little market power, particularly in competitive markets, tend not to tie or not to bundle such products."

However, the Commission's approach does not provide sufficient insight on whether the tying practice could increase the welfare. This is because there is very small demand for unbundled product and high demand for the bundled product in the market. The issue was one of the crucial points in Microsoft case. The Commission simply considered the existence of media players as a sufficient evidence in order to show the separate consumer demand for media players. Correspondingly, the Commission concluded that there exists a separate customer demand and the products are different [41]. The Commission's approach is criticized seriously since it did not take into account the magnitude of demand. The analysis was completely inadequate for technology markets, which are driven by dynamic innovation and where customers' behavior changes rapidly.

Customary Commercial Practice test is also applied in order to detect the existence of two different products**.** In cases where the tying arrangement is applied as part of the customary commercial practice, it may not be perceived as abusive. However, the practical problem of this test occurs where there is only one player in a particular market. In this case, it is not easy to objectively detect whether such action is a customary commercial practice or not.

[41] Robert O'Donoghue and Jorge Padilla, The Law and Economics of Article 102 TFEU (2nd edn, Hart 2013) p. 618-619.

4.2 Coercion (Compulsion, Forcing) of buyers[42]

The sale of two distinct products is usually considered as tying arrangements within the meaning of competition policy norms. Particularly, in cases where the seller of the tying product prevents the buyer from choosing another supplier for the tied product, tying arrangements prevail. In this regard, the practice of depriving buyers of choosing another supplier is called as coercion[43]. The coercion of buyers could be contractual or economic. Whereas contractual compulsion arises in cases where the tying arrangement is implemented as part of a contractual arrangement, economic coercion arises in cases where the seller uses its economic power over the buyer. Even though there is no debate as to whether contractual compulsion is sufficient for the compulsion criteria of the tying practices, the content of the economic compulsion is still not clear. Although solely tying two products and providing certain discounts cannot be enough, such rebate should be sufficient in order to make the economically rational buyer to remain loyal to the seller[44].

Decisional practice of the Community Courts does not give a clear indication as to whether coercion of the buyers is one of the formal requirements of the abusive tying or not. In Microsoft judgment, the General Court clearly puts forward that "(…) *Again, neither Article 82(d) EC nor the case-law on bundling requires that consumers must be forced to use the tied product or prevented from using the same product supplied by a competitor of the dominant undertaking in order for the condition that the conclusion of contracts is made subject to acceptance of supplementary obligations to be capable of being regarded as satisfied (...)*[45] " However, the Commission in its Microsoft web browser decision stated that "(…) *computer manufacturers and end users could not technically and legally obtain Windows without Internet Explorer and that the tying was liable to foreclose competition on the merits between web browsers* (…)[46]"

[42] It must be emphasized that Coercion of the buyers is not a formal requirement.
[43] The Unilateral Conduct Working Group, International Competition Network, Unilateral Conduct Workbook Chapter 6: Tying and Bundling, Presented at the 14th ICN Annual Conference Sydney, Australia April, 2015 para 33
[44] Karakilic Hasan, *Rekabet Hukukundan Baglama Uygulamalari* – Tying Arrangements under Competition Law XII Levha Pub. 2013 p. 68-71.
[45] Case T-201/04, Microsoft v Commission [2007] ECR II-3601, para. 970.
[46] Case COMP/C-3/39.530, Microsoft (tying), Commission Decision of 16 December 2009 para. 36

4.3 Anti-competitive Foreclosure

As we have explained under the Section II of this paper, the theory of harm associated with the exclusion of rivals prevails. Basically, in cases where the demand is captured from the competitors in an anti-competitive way, the anti-competitive foreclosure effect is likely to arise. The amount and the identity of customers being tied through the means of tying and bundling arrangements are the determining factors in order to assess the purpose of potential foreclosure effect[47].

There are some justifications for tying and bundling arrangements, particularly objective necessity or having part of the commercial customs. The commercial objective reasons of dominant firms ire generally valid for any other firms as well. In such cases, the firms in question are required to prove that they will not be able to market the products in the absence of tying and bundling arrangements. The possible rational behind the reasons could be public health and security[48].

The Commission should analyze the claims of dominant undertaking in order to decide whether the conduct can be justified or not. This is in line with both Article 102 of TFEU and the Guidance. The Dominant undertaking can demonstrate that either its conduct is objectively necessary or it produces efficiencies, which will offset any potential anti-competitive effects[49].

In one of its precedents, Hilti, the dominant player, argued that tying nail guns to its nails improved the safety and reliability of the overall fastening system. However, the Commission decided the overall existing safety controls and standards in the European Union were sufficient, therefore rejected the justification claim of Hilti. The Commission further stated that tying arrangement was not the least restrictive action in order to achieve the safety and reliability, consequently Hilti's conduct was not solely

[47] Penelope Papandropoulos, Article 82: Tying and bundling, 6 June 2006 Competition Law Insight
[48] Karakilic Hasan, *Rekabet Hukukundan Baglama Uygulamalari* – Tying Arrangements under Competition Law XII Levha Pub. 2013 p. 75
[49] Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings para.28

driven by such concern. The Commission also argued that Hilti failed to demonstrate any evidence of accidents resulting from the usage of millions of nails produced by other firms[50].

It must be emphasized that the burden of proof is on dominant undertakings in order to demonstrate that its conduct was objectively justifiable. For this purpose, the dominant undertaking can use either legal or economic tools.

5. Approaches of the Commission and Authority to the tying and bundling practices

In an attempt to get a better understanding of the Commission's evolving approach to the tying and bundling arrangements, we find it prudent to examine some of the most significant case-law of the Commission.

In *British Sugar*[51] decision, the Commission evaluated British Sugar's practice of offering sugar only at delivered prices in order to tie the supply of sugar to the delivery service of sugar. Since British Sugar was dominant in the market for white granulated sugar in terms of both retail and industrial sale in Great Britain, the Commission concluded that "*reserving for itself the separate activity of delivering the sugar which could, under normal circumstances be undertaken by an individual contractor acting alone*" constitutes an abuse. The Commission took the view that the practice of tying the sale of sugar to the delivery transports, deprived buyers choice of other delivery companies.

The decision is a clear example that the Commission did not adopted a *rule of reason* approach. This is because the Commission did not even evaluate whether British Sugar's tying arrangement had foreclosed the market for any other competitors or such arrangement had any other anti-competitive effect on the transport market. The Commission found sufficient that British Sugar had reserved the separate sugar delivery

[50] Ahlborn, Christian, Evans, David S., and Padilla, A. Jorge 'The Antitrust Economics of Tying: A Farewell to *Per se* Illegality', *Antitrust Bulletin,* Spring-Summer 2004 p.36-37.
[51] Napier Brown v. British Sugar, Commission Decision 88/519/EEC, 1988 O.J. (L 284) 41

market for itself and conclude that such tying is anti-competitive and constitutes an abuse.

The Commission's Tetra Pak II[52] decision concerns Tetra Pak's tying of consumables to the sale of its primary products. The conduct under the focus of the Commission was Tetra Pak's, as the biggest supplier of carton packaging machines and materials, requiring from the buyers of its machines also to purchase their carton requirements from Tetra Pak. The Commission and the General Court both perceived such arrangement as tying and found it as an abuse of dominant position.

Tetra Pak claimed that the clauses were justified since they eliminate the difficulty of attributing responsibility for any defect in the system to the supplier of the machine and the supplier of the packaging material. Tetra Pak further claimed that tying was necessary to protect the public health from the potential dangers that may arise from storing milk at ambient temperatures. The Commission rejected all the claims of the Tetra Pak on the ground that the conduct was not proportionate.

The Commission, in *Hilti*[53] decision, among other things, assessed the tying of the sale of nails to the sale of cartridge strips. The Commission concluded that tying the sale of cartridge strips to the sale of nails constituted an abuse of the dominant position. The Commission further stated that "*(...)These policies leave the consumer with no choice over the source of his nails and as such abusively exploit him. In addition, these policies all have the object or effect of excluding independent nail makers who may threaten the dominant position Hilti holds. The tying and reduction of discounts were not isolated incidents but a generally applied policy.*"[54]. Commission rejected Hilti's arguments that its business practices were motivated by safety and reliability concerns.

In *Microsoft* decision, which concerns the streaming media player software that was distributed on computers, the Commission found that Microsoft had abused its dominant position in client operating systems through tying Windows Media Player

[52] Tetra Pak II, Commission Decision 92/163/EEC, 1992 O.J. (L 072) 1
[53] Eurofix-Bauco v. Hilti, Commission Decision 88/138/EEC, 1988 O.J. (L 065) 19
[54] Eurofix-Bauco v. Hilti, Commission Decision 88/138/EEC, 1988 O.J. (L 065) 19 para. 75

(WMP) to Microsoft's client operating system. However, the Commission clearly adopted the view that in order to conclude that the integration of WMP into Windows amounted, in and of itself, to be abuse of a dominant position, it needs to be shown that the exclusion of rivals on the market for the tied product was to be expected[55].

It could be argued that the Commission deviated from the form-based approach established in *Hilti* and *Tetra Pak II* by assessing the likely or actual effects of tying on consumers and competition. Within the scope of the decision, the Commission emphasized the good reasons not to assume, in the absence of further analysis, that tying WMP constitutes abuse since competing media players were readily available through downloads and often for free[56].

Upon appeal of the Commission's decision, the General Court, in the review of the Commission decision, adopted a view which does not find it necessary to show the likely effects of tying arrangement and concluded that so long as the tying gives a competitive advantage to the dominant firm on the market for the tied product, it is deemed sufficient to establish an abuse[57]. General Court's judgment was not clear and consistent. While some commentators interpreted the judgment as a rejection of an effects-based approach to tying[58], some commentators interpreted the judgment as a clear sign that the General Court was willing to take a more economic approach to tying[59].

In light of the Commission's and the European Courts' case law, it can be concluded that the Commission and the European Courts do not make any distinction among the different types of tying. Such approach omits the different underlying effects and efficiency gains of different tying arrangements. There seems to be a little sign towards

[55] Case T-201/04 Microsoft Corp. v Commission, EU:T:2007:289, para 857.
[56] Robert O'Donoghue and Jorge Padilla, The Law and Economics of Article 102 TFEU (2nd edn, Hart 2013) p. 611-612.
[57] Ibáñez Colomo, Pablo, Beyond the 'More Economics-Based Approach': A Legal Perspective on Article 102 TFEU Case Law (March 20, 2016). Forthcoming in (2016) 53 Common Market Law Review; LSE Legal Studies Working Paper No. 09/2016
[58] C Ahlborn and D Evans, ―The Microsoft Judgment And Its Implications For Competition Policy Towards Dominant Firms In Europe,‖ Antitrust Law Journal Vol. 75, No. 3 (2009), pp. 887-932
[59] P Kollezi, ―Rhetoric Or Reform: Does The Law On Tying And Bundling Reflect The Economic Theory in Article 82 EC: Reflections On Its Recent Evolution, Hart Publishing (2009) p.147 and E Rousseva, Rethinking Exclusionary Abuses In EU Competition Law, Hart Publishing (2010), p.250.

to *rule of reason* approach against the tying and bundling arrangements of dominant undertakings, which is not sufficient to claim that the Commission abandoned its *per se* approach. The Microsoft decision can be considered as the first case where the Commission clearly signaled its intent to move away from its form-based approach to tying and rather adopt an approach based on anticompetitive foreclosure effects[60].

To have a better understanding of the Authority's rather strict approach to the tying and bundling arrangements, it will be prudent to examine its most significant case-law.

The Board, in its *Coca-Cola*[61] preliminary investigation decision, evaluated whether Coca-Cola provided its Turkuaz branded waters to the sales points through illegal marketing strategies and secret agreements in an attempt to foreclose the sales of other branded waters. The practice also requires in return supply of its Coca-Cola branded products with relatively lower prices to the sales points. Within the scope of the decision, the Board emphasized that tying arrangements against the commercial customs limit the competition through restricting the commercial freedom of the buyer. The Board further puts forward that in order for an arrangement to be considered as tying arrangement, there needs to be (i) two separate products, (ii) tied products (this need to be proven), (iii) sufficient economic power and (iv) anti-competitive effect of the agreement.

Even though, the last condition gives the impression that the Board has a *rule of reason* approach against tying practices of the dominant player, when the section for the anti-competitive effect is examined in detail it can easily be seen that the Board has the following view: "*(...) tying arrangement of the dominant players would constitute an infringement within the scope of the Article 6 of Law No. 4054. The aim of the Article 6 of Law No. 4054 is preventing the dominant players to impose condition which are against the commercial independence of the buyers which have no possibility to negotiate".* The decision clearly puts forward that the Board has a *per se* approach to the tying arrangement and clearly ignores all the potential pro-competitive motivations

[60] *Microsoft,* OJ 2007 L 32/23, upheld on appeal in Case T-201/04, *Microsoft v Commission* [2007] ECR II-3601.
[61] The Board's *Coca-Cola* Decision dated 23.1.2003 and numbered 03-06/59-21

arising from the tying arrangements. One can claim that there is no evidence found which shows that Coca-Cola applied tying arrangement within the scope of the investigation and thus the Board did not find the opportunity to evaluate whether the potential pro-competitive motivations offsets the potential anti-competitive effects of the decision. However, there is no single indication that the Board would have a *rule of reason* approach to the tying arrangement of the Coca-Cola by evaluating the potential pro-competitive economic motivation reached through tying arrangement.

The Board, in its *Atlantik Gida*[62] decision, considered the obligation imposed by Ulker to its distributors and special customers. According to obligation in question, the distributors and the special customers of Ulker are indirectly required to purchase all Ulker products. This is because, according to the agreement, the distributors and special customers have to put on the market all new Ulker products along with other Ulker products. The Board considered such condition as a tying arrangement on the ground that low demanded Ulker products are penetrated into the market through leveraging market power and such clause prevents the distributors and special customers from selling other equivalent products. Moreover, the premium, which is calculated based on the turnover, will be given to the distributors and the special customers subject to the fact that they fulfill all the conditions in the agreement without any exception. Hence, such clause economically forces the distributors and the special customers to buy all the Ulker products. The Board, at the end of its analysis, ordered the removal of the relevant clauses of the agreement, which leads to the tying arrangement.

The Board, within the scope of its analysis, looks into the possibility of an individual exemption for such an agreement in general but does not make any analysis for the clauses, which leads to tying arrangement. From the content of the reasoned decision, it is not clear what was the incentive of the Ulker to use such clauses or whether there were any pro-competitive motivations behind such clauses. However, in any case, it does not change the fact that the Board had a *per se* approach to against such tying arrangements.

[62] The Board's *Atlantik Gida* Decision dated 20.11.2008 and numbered 08-66/1059-414

Among Authority's precedents, perhaps the most famous case is *Turk Telekom – TTNET - Avea*[63] preliminary investigation in telecommunication industry. The decision is addressed to Turk Telekom and its subsidiaries namely, TTNET and Avea. Turk Telekom is the formerly state owned Telecommunication Company, TTNET is the leading Internet service provider and Avea is one of the three mobile operators in Turkey.

The subject matter of the investigation is the bundling practice of TTNET and Avea requiring TTNET customers to subscribe Avea postpaid in order to gain a free minutes equal to 109 TL during the first three months. The Board took the view that the commercial practice of TTNET and Avea constitute a mixed bundling since the products offered in the campaign could be purchased independently however, customers benefit from price-related advantages when they purchase both products together.

In its preliminary investigation, the Board has clearly pointed out that the direct anti-competitive effect of tying/bundling practices is the foreclosure risk of the tied product market, which is retail broadband Internet access services market. Specifically, the Board emphasized the two important factors, which should be determined in order to evaluate the foreclosure effect in the market:

- What type of users/customers are tied in such a way that the competitors of the dominant firm could not compete?

- What is the proportion of these users/customers in the tied product market?

For the purpose of evaluating the foreclosure effect of the campaign, the Board took into account four different factor. For the purpose of this paper, we will only refer two of them[64].

[63] The Board's *Turk Telekom – TTNET- Avea* Decision dated 09.10.2008 and numbered 08-57/912-363
[64] The other remaining factors are "properties of products" and "users' preferences". These factors are rather relevant to the complaint.

- *Number of people participated the campaign:* The Board is of opinion that the foreclosure effect would be described as a direct result of demand shift from competitors to dominant firm or its subsidiaries. Therefore, the Board gave importance to identify the magnitude of demand shift resulting from the campaign in question along with the characteristics of the customers. The Board gathered evidence that the number of customers participating the campaign is negligible in terms of both TTNET and other Internet Service Providers, the campaign has a minimal contribution to TTNET and it would not result any shift from competitors to TTNET.

- *The magnitude of discount offered by the campaign:* The Board made a price/cost analysis with the concern that whether the free minutes offered by the campaign would be equivalent to 109TL price reduction in reel terms. The Board expressed its view that the customers of the campaign only consumes less than half of the minutes that they are provided free and this constitutes a significant difference between the cost of the campaign and its reel value. It was demonstrated that there would be no exclusion or foreclosure effect for TTNET's competitors resulting from the magnitude of discount in the relevant market.

As a result of a very detailed preliminary investigation period, the Board considered that the campaign in question would not result any elimination of competition or foreclosure of TTNET's competitors from the retail broadband internet access services market even under the assumption of all other conditions are granted. The Board provided a detailed analysis on bundling practices of a dominant firm. It could be interpreted that the Board's preliminary investigation demonstrates the existence of a room for dominant firms' bundling practices in the absence of a serious foreclosure risk.

Another precedent of the Board is the investigation initiated against Turk Telekom and TTNET in 2013[65]. One part of the investigation was a bundling practices and retention campaigns of Turk Telekom and TTNET concerning Tivibu Ev which is an internet television services provided by TTNET.

[65] The Board's *Turk Telekom – TTNET* Decision dated 19.12.2013 and numbered 13-71/992-423

The Board undertook a detailed price/cost analysis of Tivibu Ev campaigns and found out that some of these campaigns are below costs, however the increasing sales volume is only observed in recent periods. Therefore, the Board emphasized that the campaigns, which are valid in a limited period of time, did not raise the concern of foreclosure for the investigated period. However, the Board underlined a serious potential of foreclosure in the event that these campaigns would be proceeded in the future with below-cost structure and the retention campaigns would be progressed with increasing discount or benefits. Finally, the Board decided to send an official letter to the parties, which clearly stimulates the possible outcome of the continuation of the commercial practices in question.

Last two decisions of the Board might be interpreted as a shift from its *per se* approach towards tying and bundling practices of the dominant undertakings since the Board evaluated whether a foreclosure effect arises from the particular practice of the dominant undertakings. However, there are certain differences, which can easily be detected among the TTNET decisions and other case law of the Board. It is clear from the content of the decisions that in both case, TTNET limited the duration of the campaign and the number of the people participated the campaign. Therefore, it is not clear whether, in the absence of such limitation with regards to the duration of the campaigns and the number of people, the Board still would have had looked at the potential effects of such practices of the TTNET. Therefore, it could be speculative to infer that the Board has a tendency to have a *rule of reason* approach towards the tying and bundling practices of the dominant undertakings.

6. General Assessment of the Commission and the Authority's Approach and our proposed methodology

Competition policy norms are strongly rooted in the economics and an interpretation of such norms without sufficient economic analysis can lead to incorrect assessments. This is particularly the case for the evaluations made for the abuse of dominance cases and especially for the tying and bundling practices of the dominant undertakings. As it is clearly stated above, tying and bundling practices of the dominant undertakings have

the potential to be used solely for the efficiency-oriented purposes and thus it would be inaccurate to solely focus on the anti-competitive effects of such practices. In order to correctly assess the tying and bundling practices of dominant undertakings, it is of the crucial importance for the regulatory agencies to clearly understand the commercial and strategic motives for such practices.

As we clearly explained above, the Commission's initial case law including Hilti, Tetra Pak and British Sugar clearly indicates that the Commission adopted a *per se* approach for the tying and bundling practices of dominant undertakings. Microsoft case could be considered as the first case where the Commission signaled a change in its approach towards tying and bundling practices of dominant undertakings by assessing the likely or actual effects of tying on consumers and competition. Upon appeal of the Commission's decision the Court of First Instance (now the General Court) put forward five different criteria to classify the tying or bundling practices as an abuse. These conditions are (i) there must be dominance in the market; (ii) the tied goods must be two separate products; (iii) the tying product is not offered without the tied product; (iv) the act of tying forecloses competitors and (v) the tying cannot be objectively justified. The Commission then followed this test in its Guidance as well. Even though, the legality test proposed by the Court of First Instance in Microsoft case could be considered as a positive step forward as it rejects the *per se* prohibition of tying and bundling practices, this test still has certain inadequacies. First of all, the application of such test will not change the fact that the vast majority of tying and bundling practices of dominant undertakings will still be considered an as abuse of dominance within the meaning of Article 102 of TFEU. Moreover, the structure of the test is not simple and is not able to simplify the evaluation procedure. The test gives the impression that the main structure of the *per se* approach to the tying and bundling practices of dominant undertakings remains but such approach is slightly modified through borrowing some elements from the *rule of reason* approach[66].

[66] Iwo Małobęcki, *Per se approach v. Rule of reason. Tying and Bundling in European Competition Law – a legal and economic analysis* accessed at < http://lawandeconomics.pl/wp-content/uploads/2011/05/3PLEC_Malobecki_full.pdf>

When we look at the limited case law of the Authority, we can easily see that the Authority's stance in terms of tying and bundling practices of the dominant undertakings seems to be way stricter than the Commission's approach. The Authority's approach seems to be similar to the Commission's initial *per se* approach, which is influenced by Harvard School's SCP paradigm. As we clearly showed above, the Authority does not have a look at the effect of the tying and bundling practices of the dominant undertakings and consider them rather *per se* illegal without looking at the efficiency motivations associated with such practices. Yet, it could be argued that there are certain decisions where the Authority looked into effects of tying and bundling practices of the dominant undertaking. However, it should be emphasized that these decisions includes exceptional clauses including the limited number of duration or limited number of customers.

Before making a conclusion it would be prudent to touch upon a concern raised by Motta in terms of the burden of proof of efficiencies. It is clearly stated within the scope of the *Guidance*[67] that the burden to prove that tying and bundling practices creates the efficiency gains and such efficiency gains outweigh the potential anti-competitive effects remains in the shoulder of the dominant firm. However, the burden of proving efficiencies will be shifted quite soon to the dominant undertakings since the potential efficiencies arising from an innovation cannot be estimated due to the uncertainty in terms of the customers' behavior against such innovation. To illustrate, an undertakings incorporating some additional components to the main product[68], can use the tying arrangement as a way to introduce product innovation into the market and most economist would be against an intervention to such tying arrangement as it is a way of innovation. However, since the products are distinct and the rivals are expected to be foreclosed by such conduct, the burden of proof that the efficiencies exist and these efficiencies sufficient to outweigh the potential anti-competitive effects will be on the shoulders of the dominant undertakings and it seems quite difficult for dominant undertakings to prove that the consumers will benefit from an innovation. Moreover, in

[67] According to paragraph 20 of the Guidance, "*The Commission considers that a dominant undertaking may also justify conduct leading to foreclosure of competitors on the ground of efficiencies that are sufficient to guarantee that no net harm to consumers is likely to arise.*
[68] Motta uses the example of adding GPS navigator devices to the cars.

cases where the rivals are foreclosed, the efficiency claims might be excluded by the condition that '*the conduct does not eliminate effective competition, by removing all or most existing sources of actual or potential competition*'[69].

It is widely accepted among economists that tying and bundling practices have potential to create efficiencies and adoption of *per se* illegality approach would lead to the ignorance of such efficiencies. Correspondingly, this is not an appropriate methodology for the assessment of tying and bundling practices. Similarly, *per se* legality approach would lead to the ignorance of the potential anti-competitive effects of such conducts and thus it is also not an appropriate methodology. *Rule of reason* approach might be considered as an appropriate approach but as Motta clearly explained, it might not be the correct methodology when the technological tying is used as a way of innovation since proof of efficiency before putting the product into the market, might be quite difficult for the dominant undertakings. Even the dominant undertaking manages to prove the existence of efficiencies and these efficiencies will offset the potential anti-competitive effects, the regulatory agencies may completely ignore these efficiencies on the ground that such conduct eliminates the existent competition in the market. Therefore, to the best of our humble opinion, the most appropriate approach to the tying and bundling practices of dominant undertakings incorporating additional components to the main product and using tying and bundling arrangement as a way to introduce product innovation in to the market is the rebuttable presumption of legality, which basically requires regulatory agencies to prove that there are anti-competitive effects arising from the tying and bundling practice and the potential efficiencies will not be able to offset the anti-competitive effects arising from the particular conduct.

In cases where tying and bundling arrangements are not used as a way to introduce innovation into the market and there is other economic and strategic rationale behind such arrangements, the most appropriate approach for tying and bundling arrangements of the dominant undertakings would be the *rule of reason* approach, where the potential anti-competitive and pro-competitive effects of such arrangements are assessed. Needless to say, in cases where the pro-competitive effect of such arrangements are

[69] Motta Massimo, *The European Commission's Guidance Communication on Article 82*

sufficient to offset the potential anti-competitive effects, such arrangements should be considered as legal and thus no intervention is required. However, in cases where the pro-competitive effects of such arrangements are not sufficient to offset the potential anti-competitive effects and the tying and bundling practice of the dominant undertaking has a potential to detriment the existent competition in the market, an intervention might be needed. It should also be emphasized that in cases where the regulatory agencies are not able to demonstrate the anti-competitive effects of the tying arrangements and even the dominant undertakings failed to prove the potential efficiency gains, such arrangement should not be intervened and the undertaking should have the benefit of the doubt.

It is undoubtedly true that the aim of competition policy norms is to enhance consumer welfare and it is unlikely, excluding the exceptional situations, for an inefficient firm to enhance the consumer welfare. Therefore, it should not be considered as an abuse to foreclose inefficient competitors by tying and bundling arrangement even such conduct is used by dominant undertakings[70]. In this regard, the approach adopted by the Guidance seems to be quite reasonable. However, comparing the efficiency level of the firms by comparing their cost which is likely to be affected by numerous subjective factors in the course of assessing the tying and bundling practices still remains to be challenging.

In an attempt to clarify our proposed methodology, we can use the Google vs. Android case which we have limited information and is still pending before the European Commission. The Commission sent the Statement of Objections to the Google (dominant player in the markets for general internet search services, licensable smart mobile operating systems and app stores for the Android mobile operating system) which basically alleges that *Google has breached EU antitrust rules by (i) requiring manufacturers to pre-install Google Search and Google's Chrome browser and requiring them to set Google Search as default search service on their devices, as a condition to license certain Google proprietary apps; (ii) preventing manufacturers*

[70] The Authors acknowledge that there could be cases where the foreclosure of inefficient firm might be anti-competitive especially in cases where the scale economies matter and it takes long time for firms to reach their maximum scale.

from selling smart mobile devices running on competing operating systems based on the Android open source code; (iii) giving financial incentives to manufacturers and mobile network operators on condition that they exclusively pre-install Google Search on their devices[71].

From the content of the allegations of the Commission, we understand that Google intend to have exclusivity on mobile devices with android. One of the methods allegedly used by Google is requiring manufacturers to pre-install Google Search and Google's Chrome browser and requiring them to set Google Search as default search service on their devices, as a condition to license certain Google proprietary apps. Such conduct includes two distinct products which have different separate demand. Moreover, the buyers are not allowed to buy the tying product which is the Google Android mobile operating system´s Play store without pre-installing certain Google apps. Google, through such arrangement, has ensured that Google Search and Google Chrome are pre-installed on the significant majority of devices. Therefore, it is clear that such conduct is considered as tying arrangement.

The first issue that needs to be considered is whether Google introduce innovation into the market through tying its products. In other words, whether Google´s forcing its Android licensees, through certain clauses, in order to pre-install some of Google´s application as a way to introduce innovation in the market? From publicly available sources, the tied products are the Google products which are already in the market and thus do not include any innovative side. Therefore, the rebuttable presumption of legality would not be an appropriate approach for the assessment of such conduct and the most appropriate approach would be the *rule of reason* approach where the potential anti-competitive and pro-competitive effects of the tying arrangement are evaluated.

[71] European Commission Press Release of 20 April 2016, accessed at < http://europa.eu/rapid/press-release_IP-16-1492_en.htm>

It is clear that device manufacturers should be free to choose the applications they pre-install on their devices[72]. However, Google´s aforementioned conducts may have potential to limit the manufacturers' freedom to choose the most appropriate applications to pre-install to the devices. Such conducts also have the potential to protect and strengthen Google's dominant position and thus can harm the competition in the market for mobile browsers since it will foreclose the rivals to penetrate to the Google´s Android devices. Then potential pro-competitive effects of such practice needs to be proven by the Google. In case the Commission is convinced that the potential theory of harm which will revolve around the foreclosure can be counterbalanced by the potential efficiency gains (which will be evaluated based on the *Guidance*), then there should not be any intervention. In the absence of sufficient efficiencies to prove that the potential efficiency gains will counterbalance the potential anti-competitive effects of such arrangement, an intervention might be necessary[73].

[72] According to the Commission, its ¡analysis demonstrates that consumers rarely download applications that would provide the same functionality as an application that is already pre-installed on the device. Therefore, device manufacturers´ freedom is important.

[73] In an attempt to avoid being speculative and due to the lack of suficient evidence, we rather not make a complete analysis of the case.

BIBLIOGRAPHY

A Cournot, *'Recherches sur les Principes Mathématiques de la Théorie des Richesses* ', Hachette, 1838

Adams, W. J. and Yellen, J. L. 1976. '*Commodity bundling and the burden of monopoly*'. Quarterly Journal of Economics vol. 90

Ahlborn, Christian, Evans, David S., and Padilla, A. Jorge *'The Antitrust Economics of Tying: A Farewell to Per se Illegality'*, Antitrust Bulletin, Spring-Summer 2004

Atlantik Gida Decision dated 20.11.2008 and numbered 08-66/1059-414

Authority's Guidelines on the Assessment of Exclusionary Abusive Conduct by Dominant Undertakings

Bork, Robert H. *'The Antitrust Paradox: A Policy at War with Itself',* Basic Books, 1978, reprinted by The Free Press, 1993

C Ahlborn and D Evans, *'The Microsoft Judgment And Its Implications For Competition Policy Towards Dominant Firms In Europe*', Antitrust Law Journal Vol. 75, No. 3 2009

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

Case COMP/C-3/39.530*, Microsoft (tying)*, Commission Decision of 16 December 2009

Crane, Daniel A. *"Tying and Consumer Harm"* Competition Policy. Int'l. 8, no. 2, 2012

Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings

E. Elhauge, *'Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory',* Harvard Law Review, Vol. 123, No. 2, December 2009

Elhauge, E. 2009b. Tying, bundled discounts, and the death of the single monopoly profit theory. Harvard Law Review 123, 397

Eurofix-Bauco v. Hilti, Commission, 88/138/EEC, 1988 O.J. (L 065) 19

Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings

Ibáñez Colomo, Pablo, Beyond the *'More Economics-Based Approach': A Legal Perspective on Article 102 TFEU Case Law* (March 20, 2016). Forthcoming in (2016) 53 Common Market Law Review; LSE Legal Studies Working Paper No. 09/2016

Iwo Małobęcki, 'Per se approach v. Rule of reason. Tying and Bundling in European Competition Law', a legal and economic analysis accessed at < http://lawandeconomics.pl/wpcontent/uploads/2011/05/3PLEC_Malobecki_full.pdf>

J. P. Choi*, 'Recent Developments in Antitrust- Theory and Evidence',* Massachusetts Institute of Technology Press 2007

Karakilic Hasan, 'Rekabet Hukukundan Baglama Uygulamalari' – Tying Arrangements under Competition Law XII Levha Pub. 2013

Microsoft, OJ 2007 L 32/23, upheld on appeal in Case T-201/04, Microsoft v Commission [2007] ECR II-3601

Motta, Massimo, 'Competition Policy: Theory and Practice'. Cambridge University Press 2004 Cambridge

Motta Massimo, *'The European Commission's Guidance Communication on Article 82'*

Napier Brown v. British Sugar, Commission Decision 88/519/EEC, 1988 O.J. (L 284) 41

Nicholas Economides - Palgrave Macmillan*, 'Bundling and Tying'* available at *<http://www.stern.nyu.edu/networks/Economides_Bundling_and_Tying.pdf>*

Patrick Greenlee, David Reitman, and David S. Sibley, October 2004

P Kollezi, 'Rhetoric Or Reform: Does The Law On Tying And Bundling Reflect The Economic Theory in Article 82 EC: Reflections On Its Recent Evolution', Hart Publishing, 2009

E Rousseva, 'Rethinking Exclusionary Abuses In EU Competition Law', Hart Publishing, 2010

Coca-Cola Decision dated 23.1.2003 and numbered 03-06/59-21

Papandropoulos, P. *'Article 82: Tying and bundling'*, 6 June 2006 Competition Law Insight

Posner, R. A. *'Antitrust Law: An Economic Perspective'* 1976 Chicago: Chicago University Press.

Posner R.A. 'Antitrust Law', University of Chicago Press 2001

Posner, R. and Easterbrook, F. 1981. *'Antitrust Cases, Economic Notes, and Other Materials',* West Academic Publishing, Second Edition, January 1 1981

R. H. Bork, 'The Antitrust Paradox: A Policy with War at Itself', New York 1978

Robert O'Donoghue and Jorge Padilla, *'The Law and Economics of Article 102 TFE'*, Second edition, Hart Publishing 2013

St Paul, MN: West Publishing Co. Bork, R. 'The Antitrust Paradox', New York: Free Press, 1978

Tetra Pak II, Commission Decision 92/163/EEC, 1992 O.J. (L 072) 1

The Unilateral Conduct Working Group, International Competition Network, *'Unilateral Conduct Workbook Chapter 6: Tying and Bundling'*, Presented at the 14th ICN Annual Conference Sydney, Australia April, 2015

Turk Telekom – TTNET Decision dated 19.12.2013 and numbered 13-71/992-423

Turk Telekom – TTNET- Avea Decision dated 09.10.2008 and numbered 08-57/912-363

Varian, Hal R. *'Intermediate Microeconomics A Modern Approach',* Eight Edition, 2010

Zenger, Hans and Walker, Mike, *'Theories of Harm in European Competition Law> A Progress Report' 22.02.2012*