Dipartimento
di Economia e Finanza

Cattedra IO & Competition Theory

Tying as an anticompetitive mechanism: The Google case.

Prof. Albano Gian Luigi

RELATORE

Matr.245921

CANDIDATO

Anno Accademico 2021/2022

ABSTRACT

How can a firm abuse of its market power? What are the mechanisms that could lead to an anticompetitive behaviour and how can they be exploited in such a manner? What are the legal consequences in the European competitive market?

This dissertation will try to give a context and a partial explanation to these questions. We are going to dig into the practice of tying in a broader way and break down all its effects focusing on the anticompetitive ones. Moreover, a closer look will take place to the anti-competitiveness side to of tying and all the guidelines for the European commission to analyse whether the Tying is unfair. With the digitalization which has taken place in the past years it became more and more complicated to judge the possible cases of the unfair use of some practices lead by internet-based company.

In the hyperconnected era we are experiencing people for many years have been complaining about the empowering of search engines and tech enterprises. One of the main companies dealing with these types of issues and as consequence to be more chased by them is Google. Google has been recently convicted by the EU antitrust authority for abusing of its dominant position and sentenced with a record fine of $4.34B. The decisions have been taken after a long investigation dating back to 2011 which had the crux of the matter in an unfair and anticompetitive use of tying, which lead to an abuse of dominance of its Android-mobile operating system.

We will see that mechanisms as tying and bundling are not only used for price discrimination, consumer surplus capturing and production costs lowering but they can also be strategies to implicitly omit competitors, foreclose competition and empower market position.

TABLE OF CONTENTS

INTRODUCTION 1

1.WHAT IS TYING? 2

1.1 **Price Discrimination** 2

1.2 **TYPES OF TYING** 5

1.3. EFFECTS OF TYING 6

1.3a EFFICIENCIES 6

1.3b INEFFICIENCIES 8

2. TYING AS AN ANTICOMPETITIVE PRACTICE 11

2.1 COMPETION LAW IN EUROPE 11

2.2 Guidelines of European Commission on tying 14

3. THE GOOGLE CASE 16

3.1 BACKGROUND 16

3.2 THE TYING PRACTICES 17

3.3 ANTICOMPETITIVE EFFECTS 19

CONCLUSIONS 21

INTRODUCTION

Tying in antitrust is a grouchy topic, it is to say that it is not just a practice crystal clear to interpret and judge since it has some features which are both beneficial and detrimental for competitors and for consumers.

The overall intent of this dissertation is to analyse the effects of tying, see how they are regarded by European competition authorities and identify them in the real case of Google. Indeed, in the first section of this dissertation it is found a deep explanation and cataloguing of the different practice of tying, in particular its link with price discrimination strategy, the different types of tying with some examples to help break them down and finally what are both the possible efficiencies and inefficiencies which may fall in anticompetition. I would like to stress this overview of tying since in economic literature tying is often introduced in the skinniest way possible.

Moving on with section two the focus will be on European Competition law. First an overlook of the core objective of the European commission will be given, following with a description and a contextualization of the two main pillar of European antitrust law: Article 101 and Article 102 of the Treaty of the Functioning of the Functioning of the European Union.

After having defined the Articles and described which are the condition for detecting a violation of them, the attention moves to the concept of dominant position for a further discussion.

Conclusion of section two will be held by the common view of tying by the European Commission seeing how the view on this practice have changed in the last decades.

Section three has the core objective of analysing the Google case for the abuse of dominant position using the mechanism of tying in the android operating system market. The focus will be first on the background of Google, taking in consideration its strategic ownership of Android Operating System. Then the attention will be shift to the case itself analysing the anticompetitive conducts for which Google has been found guilty and finally, we will see which the effects were caused by this type of behaviour on both producers and consumer which have created an anticompetitive environment.

1.WHAT IS TYING?

Tying is a form of price discrimination; it is a mechanism used for capturing surplus and its often paired with its relative “Bundling”. Tying refers to a seller’s conditioning the purchase of one product on the purchase of another. In its pure definition it refers to a situation in which a product A (tying product) is sold on its own but necessarily requires for it to perform a second product B (tied product) produced by the same manufacturer. A practical example might be the home coffee market: Nespresso produces its own coffee machines, but Nespresso’s coffee pods are required in order make coffee, in this market the tying practice is not harmful to consumers since coffee machines and coffee pods are interchangeable among different brands, so customers are free to choose among several qualities/types of machines and pods, then they are not obliged to purchase the Nespresso’s premium ones.

As stated, previously the term “Tying” is basically always accompanied by the one of “Bundling” since it is a common mechanism of price discrimination, in the practice of bundling, the two goods in question are related or complementary and there is the option of buying separately (mixed bundling). Tying (pure bundling) means that the products are available only as a bundle (Tirole, 2005). The distinction between tying and pure bundling is inconsequential if the tied product is valueless without the tying good (Tirole, 2005) (2). In general, the concept of “pure bundling” refers to the economic literature while the “tying” is mostly referred to antitrust issues.

1.1 **Price Discrimination**

To end the core principle of tying its helpful to have a look to one of its main uses which is to price discriminate. Not surprisingly the meaning of price discrimination recalls some functions of tying, indeed price discrimination strategy refers to a conduct in which consumers are charged for identical or similar goods & services with different prices. It is possible also state that price discrimination happens whenever goods & services are priced differently among consumers share the same marginal cost.

The main intent of this pricing strategy is for firms to grab at least part (and eventually all) of the consumer surplus which may be left through applying linear monopoly price.

Price discrimination does exist based on some instances: consumers do not have the same demand for a given good or service, the firm has some market power and the firm prevent arbitrage. If consumers had identical demands for a good, then all consumers would demand the same amount of the good for each price, and the price and quantity of the good would depend only on the number of consumers in the market and the ability of firms to supply the good (the supply curve). If firms have no market power, that is, no ability to affect the

price of the goods they sell, the theory of perfect competition implies that all goods would be sold at one price (the law of one price). Finally, if consumers can arbitrage price differences, any attempt to charge higher prices to some group would be defeated by resale.[1]

So let us go then see why a firm may decide to take advantage of price discrimination using Tying and Bundling.

We first start by recalling Adam and Yellen model of 1976, the framework considers some principle and assumption:

- There are two goods: 1,2.
- There are constant marginal costs: mc1, mc2; and the cost of bundling is just mcB = mc1+mc2.
- Unit demand.
- Consumers reservation prices are: r1, r2; and the reservation price for the bundle is rB = r1+r2.
- No economies in the bundling process, no complementarities in consumption.
- Complete information

We see that for a potential firm there are three feasible pricing options:

1. Simple monopoly pricing: which is setting two optimal but different prices for the two good (p1*; p2*)
2. Pure bundling strategies: it refers to setting a single price for the purchase of both good (pb*)
3. Mixed bundling: concerns the act of setting the highest prices for the two goods focusing on the consumers with the highest reservations prices and covering the other consumers with the bundle price (p1*; p2*; Pb*)

Let us close with a simple example to see in practice why the bundling strategy is useful for a firm in term of profits.

Suppose there are six consumers: A; B; C; D; E; F.

Assume then there are two goods (1;2) and the cost of producing each good is respectively C1=20 and C2=30

Consider the following reservation price of each good for each consumer and adding the price of the bundle as the sum of them.

[1] R. Preston McAfee, Price Discrimination, in 1 ISSUES IN COMPETITION LAW AND POLICY 465 (ABA Section of Antitrust Law 2008)

Consumers	1	2	Bundle
A	10	90	100
F	18	82	100
B	45	55	100
C	60	40	100
E	75	25	100
D	90	10	100
	C1=20	C2=30	CB=C1+C2=50

Following the feasible solutions described before with basic economic reasoning we will see that using monopoly pricing:

P1*=60 with max profits π =(p-c1) *3=120

P2*=82 with max profits π = (p-c2) *2 = 104

Tot π =224 with (P1*; P2*) = (60;82)

Using instead the bundle price:

Pb=100 with max profits π = (Pb-cb) *6=300

Tot π = 300 with (Pb*) = (100)

Finally with mixed bundling:

Target consumer "D" for good 1 setting (P1*) = (90)

Target consumer "A" for good 2 setting (P2*) = (90)

Cover the residual consumers "B; C; E; F" with (Pb*) = (100)

With tot π = 330

Summing up: $\pi^{uniform} < \pi^{Pure} < \pi^{mixed}$.

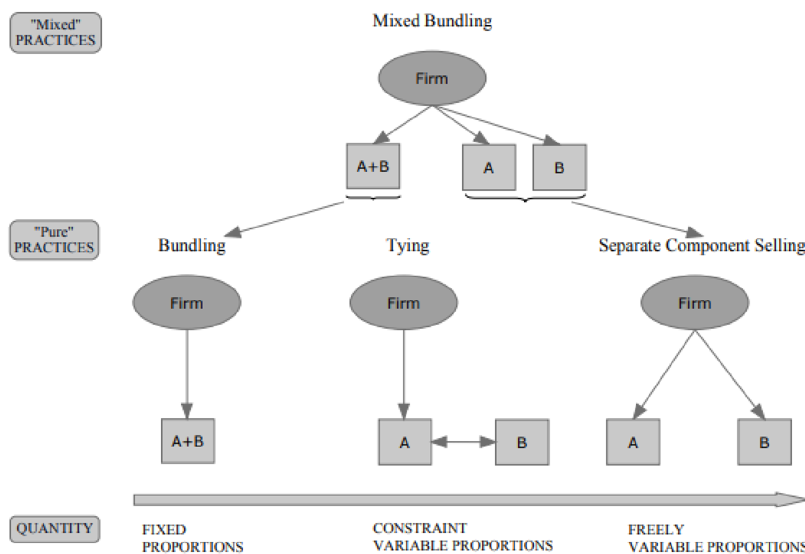
1.2 **TYPES OF TYING**

Recently we stated Tying as "pure bundling", but it is more effective to break down all the different facets of this practice. A distinction can be made between Static Tie and Dynamic Tie.

Static Tie: It can be considered as half of a mixed bundle or an exclusivity arrangement (R. Van De Bergh). In this case a customer willingù to buy a product A, must also purchase a second product B, the peculiarity is that Product B can be acquired separately. So, the possible outcomes of purchase are B; A-B. Hence in the instance of static tie the purchase of the "tying product" is related to the "tied product".

Dynamic Tie: This typology of tying as the name suggest is a dynamic form of pure bundling, the customer to be able to buy product A is also required product B but the quantity of product B purchased may varies among customers. Hence the combination for sale may be: A-B; A-2B; A-3B and so on. The exclusivity characteristic of static tie is maintained but the amount of tied product may differ. An example can be the video games market: A sony playstation ™ works only with playstation's games which are bought in different quantities according to customer needs (often labelled as "technological tie").

The table below sum up in a simple way the possible practices regarding tying:



[2]

[2] *Source of the table: "TYING AND OTHER POTENTIALLY UNFAIR COMMERCIAL PRACTICES IN THE RETAIL FINANCIAL SERVICE SECTOR'' by Centre for European Policy Studies (CEPS) Andrea Renda Rym Ayadi Marco Lamandini Sarah Cheliout Donatas Mykolaitis Anissa Naouar Diego Valiante.*

1.3. EFFECTS OF TYING

Since we gave a broader context and definition of the tying strategy it is reasonable to analyse what its effects could be and why it is well-known to antitrust authorities. We will first have a look to welfare increasing effects of tying and then proceed analysing what are the inefficiencies that may arise using the approach of tying.

Concerning Tying, the "Chicago School of Economics" economists with neoclassical price theory explained that in many circumstances firms cannot use tying to leverage a monopoly position in one market to secure extra profits elsewhere, as a result known as the *single monopoly profit theorem.* In brief with no competition cost tying is socially efficient and no illegal concerns should arise regarding these strategies. To understand the Chicago reasoning. Assume two complementary products: the first is sold at the profit-maximising price of €200 and the second product is competitively set at €30. To achieve a double monopoly profit, the sale of the first product must be made contingent upon the purchase of second product and the price for the latter product must be increased to, for example, €50. However, if the price of the tied product is higher than the competitive price, consumers will perceive the package price as too expensive and will buy less of the tying product (Posner 2001,197; Bork 1993,365). Since consumers are not willing to pay €250 for the first product sold in combination with the second one, the firm will have to lower its package price to maximise its profits; in the example the optimal price would be €230. Hence for the Chicago School's economists achieving a double monopoly profit through tying is not possible.

1.3a EFFICIENCIES

The antitrust bulletin spring/ summer of 2004 drafted by Christian Ahlborn, David S. Evans and A. Jorge Padilla list some welfare increasing effects of tying such as:

a. *Reduction in production and distribution costs*: Tying may reduce costs of production and distribution by giving rise to both economies of scale and scope, indeed by pure bundling two different goods can be produced by the same machineries allowing the manufacturer to reduce the complexity and size of its factories. An additional look is for marketing costs which can also be reduced when various products and services are combined.

b. *Reduction in transaction costs*: This point is deeply related to the further analysis of this dissertation; it is assumed that tying reduces the cost of searching all the possible different combination of goods to satisfy a consumer's complex need. We will see that this was one of most controversial point in the recent google case in which it reduced transaction costs of finding the best search browser and app installer obliging android device developers to pre-install them but avoided competitors to innovate and to compete fairly on the android operating system. Another example of transaction costs reducing can be translated in the financial sector where now consumers are fully used to buy bundle of stocks composed of stock selection, purchase, and financial advice.

c. *Product improvement*: when a product is tie or bundle, the mix can be worth than the sum of the different parts and the combined product offers benefits to the consumers that go beyond the several products added together.

d. *Quality assurance*: The assumed principle is very simple; manufacturers are specialized in the production of difference products or components and as a result when they are combined or tied together the premium quality is maintained and give benefits to consumers. Taking back the example of the videogames industry used some paragraphs above: browsing on Youtube it is possible to find guides explaining and showing you how it is possible to assemble using different materials a functioning home-made Nintendo Wii U ™ together with its personalized controller. Now the following reasoning is straight forward: It works? Yes. The quality, design and the functioning are reliable? Absolutely not.

e. *Pricing efficiencies*: Augustin Cournot showed, in work published in 1838, that a firm monopolizing the markets for two complementary products would charge lower prices than would two separate monopolists each selling a different product. That is, complements may be priced lower if offered by the same firm in a bundle. This is like the well-known "double marginalization" problem in the analysis of vertical integration, where a monopoly provider of two goods at different levels of supply will maximize its profits across the two goods, while separate providers will price each good at the individual profit-maximizing price.

1.3b INEFFICIENCIES

After years of discussion, it seems that it has been found a convergence in the thought that under certain conditions the practice of Tying may create undesired effects. However, the focus for the aim of this work will be shifted on the inefficiency of entry deterrence of competitors since it is relevant for the Google case which will be reported.

For instance, we can report some results in past analysis of Tying by Michael Whinston in his paper of 1990 "Tying, Foreclosure, and Exclusion" appeared in the American Economic Review and by Barry Nalebuff in his papers of 2004 commissioned by UK Office of Fair Trading.

Basically, the idea of Whinston is that the price of the second market is not taken for the monopolist in the first market as stated by the "single monopoly profit theorem", arguing that tying has the potential of changing prices in the second market. Whinston found as the central pillar of this reasoning the possibility that the market is neither a perfectly competitive nor a monopoly but an oligopoly.

The basic intuition is that denying the economies of scale and hence denying profits is possible by tying the sale of a product to another product in which he has a monopoly and reducing the demand of the tied product available to other producers.

The model assumed by Whinston is the following "There are two markets, which I label A and B. Market A is monopolized by firm 1 (say, because of a patent). Market B, on the other hand, is potentially served by two firms, firm 1 and firm 2. The products of firms 1 and 2 in market B are differentiated. Production in market B involves fixed costs of Ki plus an expenditure of CBi per unit for firm i. Unit costs for good A are CA. For expositional simplicity, I ignore the possibility that there are fixed costs for product A. Consumers, who are indexed by d E (0,1) with total measure 1, each desire at most one unit of good A and one unit of good B. All consumers have a reservation value of Y > CA for good A, while a consumer of type d has a valuation of VB1(d) for a unit of firm i's product B"

Whinston showed that if a firm precommit to Tying will cause a less earning in a second period for a firm 2, as stated in his preposition "*In the subgame of the commitment game where both firms are active and firm 1 has committed itself to producing only the bundle, firm 2 earns less than it does in the independent pricing gam*e".

The proof is expressed by Whinston in the following reaoning:" The intuition for the proposition, centers on the way in which firm 1's pricing incentives change when it bundles. In an independent pricing game, firm l's best response PB*(PB2) satisfies:

(1)

$$[PB1 \times (PB2) - CB1]x1' \times (PB1 \times (PB2), PB2) + x1(PB1 \times (PB2), PB2) = 0$$

Where PB1= price of good B in market be of firm 1

PB2= price for good B in market B of firm 2

CBi= cost of unit B for firm i

By contrast, when firm 1 bundles and sets price P*, the demand for its bundle is given by $x'(P* -Y, PB2)$and its best response to firm 2's price PB2 by P*(PB2) such that:

(2) $[P*(PB2) - CA - CB1] \times X1'(P*(PB2) - Y, PB2) + X'(P*(PB2) - Y, PB2) = 0$

Where CA= unit cost for good A

Y= reservation value for good A

Note first that if Y= cA, then P*(PB2) = PB1*(PB2) + Y. However, if Y > CA, then at P* = PB1×(PB2) + Y the left-hand side of (2) is strictly negative. Thus, it must be that P*×(PB2) < PB1×(PB2) + Y: firm l's optimal effective price for good B1 is lower under bundling than under independent good pricing. The reason is straightforward: when firm 1 is bundling, to make profitable sales of its monopolized product, good A, it must also make sales of good B1. This leads it to cut price to take sales away from firm 2, an effect I call "strategic foreclosure"".[3]

To understand the principle of Whinston's model it is useful to look at the analysis made by Eliana Garcés in her paper "An Introduction to Tying, Foreclosure, and Exclusion by M.D. Whinston.".

She basically explains what Whinston wants to say that is the concept of pre-commitment to tied products. So, when the conditions of independent demand of all goods and homogeneity of consumers hold, we will not experience any relevant change applying tying without pre-commitment.

Therefore, the single monopoly profit theorem of the Chicago School of Economics holds, and the firm will never force the tying if it is not appreciated enough by its consumers. Or at the same way the firm will do the tying, but the prices will not be affected in a profitable way and will be the same as without the price discrimination practice.

---

[3] *Michael D. Whinston: "Tying, Foreclosure, and Exclusion"- The American Economic Review, Vol. 80, No. 4, (Sep., 1990), pp. 837-859*

Instead, when pre-commitment to tying is applicable and not making available the tying product alone, there exists the possibility of a foreclosure effect since the price of the tied product must decrease to still be able to compete on the sales.

We notice that margin on the monopolized product plays a crucial role, since it determines the ability to lower the price of the tied product (the higher the margin, the lower the price).

Eventually this mechanism can outperform a rival competing firm and oblige it to exit.

We conclude that this kind of behaviour is useful only when the foreclosure effect is achievable in addition with consequence of a non-re-entry of the rival firm. Finally, we must take into consideration that the foreclosure effect is not enough for the success of this strategy alone, it is important that the tied product is sustained by a substantial demand of the product by consumers.

Closing the topic of entry deterrence with the results of Nalebuff, he basically argued that entry deterrence it is also possible without commitment if rivals have access not in both market but just in one. Nalebuff showed that under some conditions like variable proportions of product, independent demand for products (the demand of the tied and tying product are not correlated), and inelastic demand of the tied product the incumbent firm may decide to charge customers less in the monopolistic market and to slightly increase the price in the tied market.[4]

To close Section 1 overviewing Tying I would like to provide an example of the Nalebuff argument just to show effects of tying with basic economic reasoning.

Then assume there is a Firm X which produces two good: A and B. Suppose also that Firm X is dominant in the B market and equally compete in the A market. Finally conclude our assumptions by stating that all the conditions stated above by Nalebuff (variable proportions of products, independent demand…) hold.

At this point it is reasonable to presume that Firm X can maximise its profit in market B by setting a price Pb and let the price of A be set by the market conditions that will lead Pa to be equal to marginal cost.

Nalebuff then says that Firm X can do the following:

- Set a bundle (A + B) at price = Pb + Pa = Pb + c
- Increase price of B by a small amount leading to Pb = Pb + δ

[4] *The increase of the demand will cover the loss form the discount.*

Now the consumers that need both goods face the decision of paying a higher price for B and buy at A at the competitive price c or buy the bundle offered by Firm X and get a discount on good B.

It is trivial to notice that competitors in market for A are disadvantaged since they can not compete in the offering. Moreover, the consumer who only need B are harmed since they must pay the higher price Pb = Pb + δ.

We can conclude that this type of situation harm consumer welfare in the case of the consumer who does not take advantage of the bundle but buys only the good at higher price and that this strategy reduces social welfare in case it leads to a greater monopoly price than the one that would have occurred without the strategy.[5]

2. TYING AS AN ANTICOMPETITIVE PRACTICE

Considering that we summed up all the possible efficiencies and inefficiencies of this practice, it is now time to analyse why tying is on all radar of competition authorities and to see also what are the negative features that might lead to anticompetitive effects with regards both to consumers and competitors. We will focus on the perspective of EU competition law and its point of view with Tying, and then see that as time went on this pricing strategy has been seriously taken into consideration. Indeed, several adjustments in the evaluation of tying have been undertaken reasoning on some conditions that must appear and some harms that might cause.

2.1 COMPETION LAW IN EUROPE

It is appropriate to start by the concept that the European Competition Law has as its main goal to ensure competition in its domain area, it is to say to regulate and prevent any form of anticompetitive practice to ensure that competition in the market is not restricted in a way that is detrimental to society. The definition of the absolute goal of EU competition law can be identified in the new article 3 (3) of the Treaty on the Functioning of the European Union (TFEU) stating:” *The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of*

[5] *As stated by Greenlee, Reitman and Sibley (2008*)

protection and improvement of the quality of the environment. It shall promote scientific and technological advance".

It is also important to specify that the concept of fair competition does not refers to the willingness of having all competitors at the same level and no one should prevail to the others. In fact, holding a dominant position is not prohibited as such; However, dominant firms have a special responsibility not to further reduce or eliminate the degree of competition still existing on the market.

To give a practical example of what I am saying, citing Justice Antonin Scalia: *«the mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system. The opportunity to charge monopoly prices – at least for a short period – is what attracts "business acumen" in the first place; it induces risk taking that produces innovation and economic growth. To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct»* (2)

It is possible to sum up the competition harming practices in three main categories:

1. **Restrictive agreements** (Section 1 of the Sherman Act; Article 101 TFEU; Articles 2 and 4 of Law No. 287/1990)
2. **Unilateral anticompetitive conduct: monopolization** (Section 2 of the Sherman Act) **and abuse of dominance** (Article 102 TFEU; Article 3 of Law No. 287/1990)
3. **Concentrations** (Section 7 of the Clayton Act; Regulation No. 139/2004; Article 6 of Law 287/1990)

As reported in brackets these practices fall in some restriction and rules dealing with it. The European antitrust law relies on the articles 101 to Article 109 of the TFEU but both for the purpose of this dissertation and for the actual implementation of the articles the focus will be on the two main pillars: Article 101 and Article 102.

Article 101 TFEU: Article 101 of the Treaty on the Functioning of the European Union prohibits any agreements or cartels between Member States that could disrupt free competition within the internal market. It was introduced as part of the EU's general anti-trust rules to prohibit 'any agreement or concerted practice which is made between two or more undertakings, which may affect trade between Member States, and which has the object or effect or preventing, restricting, or distorting competition [6]. This article applies to oral agreements, non-binding arrangements and understandings, express written contracts, and other types of informal collusion. The focus of the Article 101 relies on the undertaking's anticompetitive practices such as: directly or indirectly price-fixing; limit or control of the markets, investments, technical development, or

6 da E Wendt. *EU Competition Law and Liberal Professions: an Uneasy Relationship?* (Martinus Niijoff Publishers, 2012) 496

production; implementation of contracts with unequal conditions to equivalent transactions and contracts, which detriments competition; market or source of supply cartels; supplementary obligations with no connection with the subject of the contract.

The application of this article by the commission happens whenever a certain practice reveals an anticompetitive effect even though it has no effects on the market. The same applies also whenever the practice has no intent of harming competition but causes anticompetitive effects.

ARTICLE 102 TFEU: Article 102 of the Treaty on the Functioning of the European Union governs abusive conduct by dominant undertakings. The possession or strengthening of a dominant position by way of competition does not fall within the scope of the prohibition.

As we said before holding a dominant position is not an offense to competition law and the actual dominance of players like Google is just the result of innovations and entrepreneurship. Indeed, the application of the article need to conjunction between a dominant position and the abuse of it.

We can identify some conditions that have to be met to detect a violation of Article 102:

a. a dominant position on the relevant market must be held by one or more undertakings.
b. the position must be held in the internal market or a substantial part of it.
c. abuse of the dominant position.
d. actual or potential effect on trade between Member States.

It is not necessary to demonstrate that the abusive conduct is a result of the exercise of the dominant position in the relevant market. The undertaking must not even be aware of its dominant position. In other words, no causal link between points (a) and (c) is required.[3]Moreover, the abusive conduct may also take place on a different market than the market dominated by the undertaking.

Artcicle 102 TFEU identifies as an offense to competition several practices which may correspond to all conditions listed above, we may find among them: Refusal to supply (refusal to sell to a specific customer); Predatory pricing (setting an unfairly low price to harm new competitors establish themselves in the market); Fidelty Rebates (discounts aim at excluding inefficient competitors); **Tying**.

Just to understand how big players in the IT industries are used to be investigated by competition authorities it is useful to remind that Google already have been fined by the Commission (€2.41B) for infringements of

Article 102 for abusing of its market dominance by giving an illegal advantage to its shopping comparison service.[7]

2.2 Guidelines of European Commission on tying

The general view of EU competition law regarding the practice of tying has been mainly influenced by the one of the American Supreme Court which sees tying agreements mostly as a mechanism to suppress competition.

There have been some cases in which the evaluation of Tying was found unlawful for example the *Hilti* [8] (Tying of nail guns and cartridges) and *Tetra Pak*[9] (Tying of packaging machineries and cartons) cases. Making a long story short in both cases the commission condemned the conduct of the two companies with solely considering the existing of abuse of dominance (Art.102 TFEU) in their respective markets stating that an objective justification for the Tying practices was missing.

Now, the first attempt of a draft of conditions regarding the Tying practice for the evaluation of cases goes back to the *Microsoft*[10]case in which the EU commission overcame the mere evaluation of dominant abusing but tried to analyse the effects of tying in the software market.

Basically, in the Microsoft case the Commission found that the company was abusing of its dominant position on the client PC operating market, where it had a market share of pretty much 90% by tying its Windows Media Player to the Windows operating system.

In addition to this overall decision the Commission outlined four conditions under which Tying was considered incompatible with Article 102 TFEU:

i. The tying good and the tied good are separated products.
ii. The concerned company is found in a dominant position in the tying market.
iii. The concerned company force customers to purchase the two products together.
iv. There exists a foreclosure effect of tying.

7 *Decision 2019/417*
[8] Case IV/31.488 Eurofox-Bauco/Hilti (1988) O.J.L 65/19
[9] Elopak Itaia/Tetra Pak (1991) O.J.L72/1
[10] Case COMP/C-3/37.792, *Microsoft Corp.,* Commission Decision, 2007 O.J.L32/23 (March 24, 2004) (Commission Decision 2004)

But it is also relevant to specify each to condition to better understand the approach it is made in evaluating every circumstance

(i) The distinction or separation of products it is indicated by the demand for them if it seen that one product's demand increase and the other decreases it is possible to define them as substitutes. On the other hand, if the demand for each product is dependent on each other it is possible to denote correlation and evidence of the belonging to the same market (Holzweber, 2018). As we have seen for tying foreclosure the two products must be part of two different markets.
(ii) This is verified even if the company it is dominant in one of the markets, obviously if the company holds dominant position in both markets, it is more likely to be blamed of abuse of dominance.
(iii) This is straight forward, if the company obliges customers to obtain the two goods together it is obvious that it is applying Tying to enter in one market.
(iv) As we have seen in previous discussion the most important anticompetitive effect of tying is market foreclosure. The European commission defines two parts for the assessment of foreclosure: a) determination of which is the tied customer; b) determination of whether these tied customers represent a relevant market share.

The interesting fact of this case is the analysis of the potential foreclosure effects that tying was able to produce, especially concerned with the development of the software market and software producers.

Finally, in 2009 the European Commission has clarified again in its Guidance Paper the circumstances that may claim for enforcement actions:

(i) A company is dominant in the tying market.
(ii) The tying and the tied products are distinct.
(iii) The tying practice is likely to lead to anticompetitive foreclosure.

Clearly the evidence of anti-competitive foreclosure represents one of the pillars in the analysis of tying, this paper does not specify how these conditions must be put in practice. Furthermore, the Commission may consider efficiency claims such as saving in production and distribution or reduction of transaction costs for customers. However, up until today there are no cases of tying in which an objective justification was accepted.

3. THE GOOGLE CASE

Google is certainly not new to be in the spotlight of antitrust concerns, in fact it has been under strict surveillance by competition authorities from back to the 2000's.

This enterprise is one the biggest and powerful companies in the world, it directly impact our everyday life focusing on sensitive aspects such as AI, search engines, online advertising, cloud computing, computer software, quantum computing, e-commerce, and consumer electronics. It is also one of the most valuable brands due to its market dominance and data possession.

Even though Google has faced several cases against antitrust institutions, the focus now will be shifted towards the most recent case which is related to what we have been discussing until now: illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine using tying.

3.1 BACKGROUND

Avoiding recapping the history of Google which does not mainly interest us, let us recap the main steps which led to the environment this company is facing now.

First, it is fundamental to know that Google's major revenues comes from its core product which is the search engine. The major move made by Google at the very beginning of the 2000's was realizing that a shift towards mobile internet was upcoming, and to empower the google search engine the company realized it had to enter in the internet mobile market.

Here is when the story begins:

Google bought the original code of the Android operating system back in 2005 and continued developing it until now. Now that internet mobile is fundamental for our everyday living is crystal clear why this acquisition had a huge impact on the market dominance, but this is not all.

Every time Google update a version of the Android operating system it publishes the code online so that it is freely accessible to everyone. This give an explanation on why most mobile devices in the market use Android: because every producer is allowed to take the code and modified it for its own purpose.

The problem which arises from this Google ownership of Android is that even if it is true that the code is available online it just covers basic feature of smart mobile operating system but not Google's Android apps.

Thus, whenever a producer wants to have access to these crucial apps it must enter in contract with Google which imposes some restrictions on the use of them.

These restriction and obligation to enter in contract with Google are the focus for antitrust concerns, in fact it is exactly these conditions that the tying practices have dominant role. For example, if a device manufacturer wants to use some of the Google services on an Android base it has Google requires the pre installation of more services owned by the company.

3.2 THE TYING PRACTICES

We turn our attention on certain practices Google has been undergoing for years that strengthened its market power using tying.

It possible to identify different products offered by google which can be spot as "tied products", let us see then which are them and if they can fall in the conditions made by the Commission to detect whether an unlawful use of tying has been made:

- The first tied product is the Android operating system itself, as we stated before if a device producer wants to fully join the Android experience Google sets some mandatory conditions to respect. One of the requirements its to preinstall Google Play Store which is fundamental to users to get further applications. In addition, Google can withhold the Android logo and trademark. A past case relevant to this topic is the one of Skyhook which was a competitor to Google's geolocation service. Basically, Skyhook complained that Google obliged Motorola and Samsung (which were under contract with Google) to disinstall Skyhook in favour of "GLS" (the Google location service). At the very end there was a favourable judgment for Google, but it was made based on the contract's conditions and no effects of foreclosure resulting from tying were considered.
- Then, it also relevant to see the Google's app as tied products: the most important are Youtube and clearly the Google search engine. It is important to state that some services provided by Google such as Youtube have no relevant competitors, indeed, such services are the basis for the tying practices of google: to get it you must also agree to preinstall others. The agreement used by Google to make clear all these conditions is the Mobile Application Distribution Agreement (MADA). The harm to producers is evident: a producer may prefer other services offered by competitors for several reasons, but it is not allowed to and even if Google consent the manufacturer to get other services outside of its domain its market power is so influent that it may be supported by users' choice not to switch to other services.

These practices as we stated before having been carried by Google for years, then let us focus now on the last major judgement against this big firm to see whether a concern on tying and its effects has been finally taken in consideration after many cases of where it was disregarded.

The Commission on July 18, 2018, fined Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine.

First, the investigation started with the determination that Google had a dominant position (first condition of the 2009 guidance paper). The Commission decision concluded that:" Google is dominant in the markets for general internet search services, licensable smart mobile operating systems, and app stores for the Android mobile operating system. General search services Google is dominant in the national markets for general internet search throughout the European Economic Area (EEA), i.e., in all 31 EEA Member States. Google has shares of more than 90% in most EEA Member States. There are high barriers to enter these markets. This has also been concluded in the Google Shopping decision of June 2017".[11]

And concerning the app stores for android operating system the Commission stated:" Google is dominant in the worldwide market (excluding China) for app stores for the Android mobile operating system. Google's app store, the Play Store, accounts for more than 90% of apps downloaded on Android devices. This market is also characterised by high barriers to entry. For similar reasons to those already listed above, Google's app store dominance is not constrained by Apple's App Store, which is only available on iOS devices".

Google obviously dominates its market and as we know holding a dominant position is not considered an offense to competition law, so let us have a look to the real breaches of Article 102 TFEU detected by the antitrust authorities that worth Google a record fine.

The breaches are divided in three main categories:

1. Illegal tying of Google's search and browser apps.
2. Illegal payments conditional on exclusive pre-installation of Google Search.
3. Illegal obstruction of development and distribution of competing Android operating systems.

Clearly the following deepening will focus on point 1.

In the practices listed above we explained what Google did, and it is exactly what the commission condemned as unlawful.

So let me report the statements regarding these tying practices of the commission:

[11] *European Commission - Press release-Brussels, 18 July 2018*

When it comes to the **tying of Google Search app** the commission stated: “Google has ensured that its Google Search app is pre-installed on practically all Android devices sold in the EEA. Search apps represent an important entry point for search queries on mobile devices. The Commission has found this tying conduct to be illegal as of 2011, which is the date Google became dominant in the market for app stores for the Android mobile operating system”.

With respect to **tying of the Google Chrome browser**:” Google has ensured that its mobile browser is pre-installed on practically all Android devices sold in the EEA. Browsers also represent an important entry point for search queries on mobile devices and Google Search is the default search engine on Google Chrome. The Commission found this tying conduct to be illegal as of 2012, which is the date from which Google has included the Chrome browser in its app bundle”.

3.3 ANTICOMPETITIVE EFFECTS

The effects that arise from this type of conduct are exactly what we have been talking about previously, indeed, it is found a foreclosure to competition and a harm to consumers.

When it comes to foreclosing competition, it has been said that on many aspects of its business, Google has no relevant substitutes giving to the firm an enormous power. As we have seen even if competitors have better alternative to certain services the producers are obliged to preinstall and let their consumers to use Google’s services (skyhook case).

The most interesting fact of this whole behaviour is that tying not only can prevent the entrance in a certain market or compel a producer to adopt a certain product/service, but it also eliminates the merit of competition. In fact, in our case it is not relevant that a competitor offers a better service which can be cheaper or useful for consumers, if someone wants to enter that specific android services market, he must enter in contract with Google no matter what.

In addition, this practice helped Google gaining shares in every new service it introduced, using tying to get into the less concentrated sectors adjacent to search.

The harm to consumers also is feasible, giving that Google as most of the online service gets a huge part of revenues from advertising, it is reasonable to assume that if competitors were closer to Google there would have been more regard to consumer's perspective (maybe lowering the frequency of apps).

There was also a correlation between harm to consumers and suppression of competition, indeed, at first there was a harm to consumers led by an increase in device prices. Computers manufacturers started bids from various search engines that wanted to be setted as default. These additional revenue of computer manufacturers but competition led manufacturers to pass these savings on to consumers through lower up-front prices. As we said, Google owning most of the major services had an advantage in being the first choice to consumers, then requiring to manufacturers to be set as default without paying it suppressed OS competition.

These are some of the indirect effects that the environment setted by Google creates, now I report what are the conclusions of the Commission: "The Commission decision concludes that these three types of abuse form part of an overall strategy by Google to cement its dominance in general internet search, at a time when the importance of mobile internet was growing significantly. Google also obstructed the development of Android forks, which could have provided a platform for rival search engines to gain traffic. Google's strategy has also prevented rival search engines from collecting more data from smart mobile devices, including search and mobile location data, which helped Google to cement its dominance as a search engine. Furthermore, Google's practices also harmed competition and further innovation in the wider mobile space, beyond just internet search. That's because they prevented other mobile browsers from competing effectively with the pre-installed Google Chrome browser. Finally, Google obstructed the development of Android forks, which could have provided a platform also for other app developers to thrive."

Summing up, the effects which came forward were foreclosure of competition for manufactures who could not compete on the merits, the harm to consumers which was both economics and psychological since Google is still regarded as the main choice whenever talking about search engines like a "default bias", and the leverage of dominance in the smartphone market to the operating systems market.

It is better to emphasise one again that all these anticompetitive practices which have emerged using tying are not directly manageable, otherwise we would not be talking about effects and context analysis to verify whether the use of tying is lawful or not. Indeed, the Commission stated:" the decision does not prevent Google from putting in place a reasonable, fair, and objective system to ensure the correct functioning of Android devices using Google proprietary apps and services, without however affecting device manufacturers' freedom to produce devices based on Android forks".

CONCLUSIONS

This dissertation tried to have an overlook of the tying practice focusing on its possible anticompetitive effects. To support and clarify this intent we had and excursus of the recent Google case regarding tying.

First, we had a look in what category falls tying identifying as price discrimination and seen why it is helpful for manufacturers to follow this practice. We focused on the main anticompetitive effects, emphasizing that foreclosure of competition it’s the most powerful effects arising from Tying and can lead also to a non-re-entry condition.

Analysing the view of competition law in Europe the focus was on that there was no clear vision on how to take into consideration Tying and that there was little regard on its anticompetitive effects focusing only on the abuse of dominance. In the last decade some conditions were set but still consumer’s welfare is preferred to anticompetitive effects.

Finally, we approached the Google case which helped us understand the real power of tying put in practice. In fact, what Google did for years has not only strengthened its position in the market, but it helped the firm itself to create an entire ecosystem. the tying practices helped Google to enter in many different sectors adjacent to its main domain with no risk, effort, and with virtual certainty to gain high share and traffics. By using Tying to expand into less concentrated sectors other than search, Google's advantage is greatly enhanced. In addition, there is corresponding damages to consumers and advertisers.

As far as I am concerned, we have just seen that the practice of Tying contributed to empower what is now the biggest and most powerful company of our time. It might be better to take into consideration also the competition policy trade-off between the welfare of consumers and technological innovation by ensuring competition.

REFERENCES

Adams, W.J. and Yellen, J.L. (1976) Commodity Bundling and the Burden of Monopoly *The Quarterly Journal of Economics*

Ahlborn C.; Evans D.S.; Padilla A.J. (Spring 2004) Antitrust Bulletin.

Cornière, A., & Taylor, G. (2018). Upstream Bundling and Leverage of Market Power. *C.E.P.R. Discussion Papers.*

Edelman Benjamin (2005) Does google leverage market power through tying and bundling? *Journal of Competition Law & Economics.*

European Commission (18 July 2018) Press release Antitrust.

European Commission. (2011). Proceedings for the application of Articles 101 and 102 TFEU: Key actors and checks and balances.

Fonseca De Andrade J.T. (2018) Tying: An Economic Analysis of the Google-Android Case.

Garcés E. (2012) An Introduction to Tying, Foreclosure, and Exclusion by M.D. Whinston *European Commission.*

Greenlee, P., Reitman, D., & Sibley, D. S. (2008). An antitrust analysis of bundled loyalty discounts. *International Journal of Industrial Organization*, 26(5).

Holzweber, S. (2018). Tying and bundling in the digital era. *European Competition Journal.*

Lorenz M. (2013) An introduction to EU competition law *Cambridge University Press.*

Nalebuff, B. (2004). Bundling as an entry barrier. Quarterly Journal of Economics.

Tirole, J. (2005). The Analysis of Tying Cases: A Primer. *Competition Policy International.*

Van Den Bergh R. (2017) Comparative competition law and economics *Edward Elgar Publishing Limited.*

Wendt I.E. (2012*)* EU Competition Law and Liberal Professions: an Uneasy Relationship? *Martinus Niijoff Publishers.*

Whinston, M. D. (1990). Tying, Foreclosure, And Exclusion. *American Economic Review.*