I. INTRODUCTION

Look down at your phone. Unlock the home screen. What applications do you see? If you have an iPhone, you probably see iCalendar, Safari, and the App Store. If you have a Windows Phone, you probably see Microsoft Outlook, Internet Explorer, and the Windows App Store. If you have an Android Phone, you probably see Google Search, Chrome Browser, and Google Play. Are you satisfied with what you see? Do you feel like your choice of smartphone applications (“apps”) is severely limited? Do you feel like you have been denied access from an innovative mobile phone operating system? Or, are you glad that when you turned on your new smartphone, several apps were waiting for you and there was an app store where you could download more? Imagine turning on your new smartphone and the only features available were text messaging, phone calls, and a working clock. Without the Google Play Store or the App Store, would you know where to begin?

In 2007, Google launched its free open-source operating system—Android.1 The HTC Dream, introduced in 2008, was the first mobile device available with Google’s Android operating system (“Android” or “Android OS”).2 With Android OS and a new line of multi-touch interface smartphones, Google set forth to compete directly with Apple iOS and the iPhone. By 2012, Android dominated the smartphone market worldwide3—that dominance continues to this day, and the European

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1 Kent Walker, Android: Choice at every turn, GOOGLE BLOG: GOOGLE IN EUR. (Nov. 10, 2016), https://blog.google/topics/google-europe/android-choice-competition-competition-response-europe/.
3 Anick Jesdanun, Android dominates smartphone market, USA TODAY (Aug. 8, 2012,
Commission ("the Commission") has taken notice.\(^4\) In April 2015, the Commission initiated a formal investigation into Google’s licensing practice of Android and its proprietary mobile apps.\(^5\) A year later, the Commission sent Google an official Statement of Objections (SO) announcing its “preliminary view that Google has implemented a strategy on mobile devices to preserve and strengthen its dominance in general internet search.”\(^6\) In November 2016, Google responded to the Commission’s SO stating that its Android open-source platform has generated innovation, promoted competition, and lowered prices throughout the European market.\(^7\)

This Comment examines the Commission’s antitrust case against Google. Essentially, the Commission alleges that Google abused its dominant position in various markets by conditioning the pre-installation of its proprietary apps on the exclusive use of its Android OS.\(^8\) In both the European Union (E.U.) and the United States (U.S.), dominant companies face antitrust scrutiny when they abuse their market position by “tying” separate products together. This Comment compares the E.U. and U.S. treatment of tying claims, specifically focusing on Google’s tying of its Android OS to its suite of mobile apps (“Google Mobile Suite” or “GMS”). Part II provides a brief background on E.U. and U.S. antitrust jurisprudence and introduces the economics of tying arrangements. Part III compares the two tying cases brought against Microsoft in the E.U. and U.S., and highlights the differences between the two jurisdictions’ antitrust jurisprudence. Part IV provides the background for the Commission’s case against Google and analyzes potential issues the Commission faces under the Microsoft framework.\(^9\) Part V briefly concludes with the proposition that the Commission’s case against Google does more to harm consumers, than to protect competition in the smartphone market.

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\(^5\) See id.

\(^6\) Id.

\(^7\) Walker, supra note 1.

\(^8\) Statement of Objections, supra note 4.

II. AN INTRODUCTION TO ANTITRUST JURISPRUDENCE AND TYING ARRANGEMENTS

A. Antitrust Laws in the United States

The United States Department of Justice (DOJ) and the Federal Trade Commission (FTC) are responsible for prosecuting violations of the U.S. antitrust laws. However, private parties may also bring antitrust claims against other private parties. Tying arrangements can be challenged under four federal provisions: (1) section 1 of the Sherman Act, which prohibits agreements “in restraint of trade,” (2) section 2 of the Sherman Act, which prohibits monopolization, (3) section 3 of the Clayton Act, which prohibits exclusive arrangements that may “substantially lessen competition,” and (4) section 5 of the FTC Act, which prohibits “unfair methods of competition.” The Sherman Act applies to tied goods and services, while the Clayton Act only applies to the tying of goods. This Comment mainly focuses on the tying analysis under the Sherman Act, but because courts often rely on tying precedent from claims brought under different statutory provisions, it should be noted that the standards for analyzing tying arrangements produce similar results under all the applicable provisions.

B. Antitrust Laws in the European Union

The Treaty on the Functioning of the European Union (TFEU) is the main source of E.U. antitrust law. Article 101, the equivalent of section 1 of the Sherman Act, prohibits “all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market.” In regard to tying arrangements, Article 101 prohibits
anticompetitive agreements that “make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.”

However, these provisions may be overcome in the case of any agreement or practice:

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not: (a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives; (b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

Article 102 parallels section 2 of the Sherman Act, and prohibits any abuse by “undertakings of a dominant position within the internal market or in a substantial part of it . . . so far as it may affect trade between Member States.”

In regard to tying arrangements, Article 102 states that an abuse may occur in “making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.” In contrast to Article 101, which prohibits anticompetitive tying absent a showing of market power, Article 102 prohibits tying by a dominant undertaking absent any actual anticompetitive effect. This Comment follows the Commission’s allegations against Google by focusing on tying arrangements analyzed under Article 102.

Regulation 1/2003 (the “Antitrust Regulation”) provides the Commission with the investigative powers to enforce Article 102. An Article 102 investigation can be initiated either by the Commission itself, or upon receipt of a complaint from a competitor, Member State, or individual. The first step for the Commission is to determine whether the undertaking concerned is dominant within the relevant market. This requires the Commission to define the relevant product and geographic

20 Id. art. 101(1)(e).
21 Id. art. 101(3)(a)–(b).
22 Id. art. 102.
23 Id. art. 102(d).
24 See Ponsoldt & David, supra note 16, at 441 (Articles 81 and 82 are now Articles 101 and 102, respectively).
26 Id. art. 17, at 13.
markets. The product market is “made of all products/services which the consumer considers to be a substitute for each other due to their characteristics, their price and their intended use.” The geographic market is “an area in which the conditions of competition for a given product are homogenous.” The Commission commonly relies on a firm’s market share to determine whether the concerned firm is dominant—a market share over forty percent is a preliminary indication of dominance. Although the Commission may determine the firm holds a dominant position in the relevant market, a position of dominance is not illegal by itself. Rather, the Commission must determine whether the firm has “abused” its dominant position.

Notably, the Commission takes the view that “a dominant company has a special responsibility to ensure that its conduct does not distort competition.” This heightened responsibility precludes dominant firms from behavior such as, “requiring that buyers purchase all units of a particular product only from the dominant company (exclusive purchasing); setting prices at a loss-making level (predation); refusing to supply input indispensable for competition in an ancillary market; [and] charging excessive prices.”

After an investigation, the Commission may issue a statement of objections (SO), which informs the undertaking of the Commission’s concerns with the conduct at issue. A company is entitled to access any non-confidential files from the investigation and reply to the SO in writing. The company may also request an oral hearing in front of an independent hearing officer. After examining the company’s response, the Commission can choose to move forward with all or part of its initial objections and close the case. Article 7 of the Antitrust Regulation permits the Commission to draft a decision prohibiting the identified violations. The Advisory Committee, composed of the Member States’ competition representatives, then provides a final check of the Commission’s decision and can submit it

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28 See id.
29 Id.
30 Id.
31 Id.
32 See id.
33 See EUROPEAN COMM’N, supra note 27.
34 Id.
35 Id.
36 See id.
37 See Antitrust Regulation, supra note 25, art. 27, at 19.
38 See id.
39 EUROPEAN COMM’N, supra note 27.
40 Antitrust Regulation, supra note 25, art. 7, at 9.
to the College of Commissioners to be formally adopted.\textsuperscript{41} Under the Antitrust Regulation, the Commission can impose fines—up to ten percent of a firm’s annual revenue—on an undertaking found in violation of Article 102.\textsuperscript{42} Companies maintain the right to appeal the decision to the General Court of the European Union (GC), which can increase, reduce, or cancel the fine imposed by the Commission.\textsuperscript{43} Ultimately, the Commission and/or the defendant-firm can appeal the GC’s ruling to the Court of Justice of the European Union (CJEU).\textsuperscript{44}

C. Tying Arrangements and I-Scream

Tying generally involves a firm conditioning the sale of one product (the tying good) on the sale of another product (the tied good).\textsuperscript{45} For example, Jay makes homemade ice cream and sells it in tubs to local ice cream parlors. Recognizing that every good scoop of ice cream deserves a fresh waffle cone, Jay begins to insist that anyone wishing to sell his ice cream also sell his waffle cones. That would be a tying arrangement in which ice cream is the tying good and waffle cones are the tied good.

Bundling is a similar practice in which a firm offers several products in a package deal. Pure bundling occurs where the firm only offers the products together and not separately—e.g., surgery with anesthesia.\textsuperscript{46} Mixed bundling occurs where the firm sells the various products both packaged together and separately, but extremely discounts the packaged price—e.g., shampoo and conditioner.\textsuperscript{47}

Tying and bundling practices raise anticompetitive concerns when a firm can leverage its monopoly power in market A into market B.\textsuperscript{48} Imagine if Jay’s next door neighbor, Timmy, was a waffle cone competitor who sells his cones to the local parlor, I-Scream. But I-Scream wishes to sell Jay’s ice cream because demand for it is so high. Jay, realizing he has significant power in the homemade ice cream market, requires I-Scream and other dealers purchasing his ice cream to exclusively sell his waffle cones. If I-Scream does not exclusively sell Jay’s waffle cones, then Jay will not provide I-Scream with his highly-demanded ice cream. Consequently, I-Scream is not in an economically reasonable position to purchase and sell

\textsuperscript{41} Id. art. 14, at 11.
\textsuperscript{42} Id. art. 23, at 17.
\textsuperscript{43} EUROPEAN COMM’N, supra note 27.
\textsuperscript{44} See id.
\textsuperscript{46} JURIAN LANGER, TYING AND BUNDLING AS A LEVERAGING CONCERN UNDER EC COMPETITION LAW 4 (2007).
\textsuperscript{47} Id.
\textsuperscript{48} HOVENKAMP, supra note 45, at 201.
Timmy’s waffle cones. Not only is Timmy hurt as a waffle cone competitor, but consumers may also be negatively affected by the elimination of substitute waffle cones.

The main concern is that tying or bundling certain products “prevents goods from competing directly for consumer choice on their merits, i.e., being selected as a result of ‘buyers’ independent judgment.”49 In the example, I-Scream’s freedom to select the best bargain in the waffle cone market is impaired by its desire to buy Jay’s homemade ice-cream. In addition, I-Scream’s ability to evaluate the true cost of either product is fogged—even if Timmy’s waffle cones are of better quality or cheaper, I-Scream will be unwilling to forego Jay’s highly demanded ice-cream in order to purchase Timmy’s cones. Accordingly, direct competition between Jay and Timmy’s waffle cones is foreclosed because I-Scream is forced to buy Jay’s waffle cones by simply buying Jay’s homemade ice-cream.

Nevertheless, selling products together can generate efficiencies.50 For example, cost savings can appear in the consumption and/or the production sides.51 When consumers would buy both products A and B separately, and the product valuations are positively correlated, the cost savings from selling the products together creates an incentive for a firm to bundle the goods.52 The ability for consumers to purchase complementary products from the same supplier is a consumption efficiency—search costs are reduced where an efficient firm can bundle the most consumer satisfying combination of products.53 Bundling may also reduce a supplier’s production and distribution costs.54 Moreover, “bundling may assure product quality by neutralizing: (1) the confusion externality regarding the source of poor performance, and (2) the cost-sharing externality when consumers knowingly use inferior products with the bundling good.”55 Essentially, the efficiency gains associated with tying and bundling certain products may ultimately benefit consumers, and thus competition.

III. THE MICROSOFT SAGA

In 2001, the United States Court of Appeals for the District of Columbia held that Microsoft’s bundling of Windows PC operating system (“Windows OS”) and Internet Explorer was not a per se antitrust violation for attempted

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50 LANGER, supra note 46, at 24.
51 See id.
52 See id.
53 Id. at 8.
54 Id. at 8–9.
55 Id. at 9.
monopolization of the internet browser market. The court remanded the issue to the lower court with instructions to analyze the tying arrangement under a “rule of reason” standard. Consequently, the DOJ decided not to pursue the issue any further, and Microsoft continued to bundle its products. In contrast, in 2007, the European Union General Court affirmed the Commission’s finding that Microsoft abused its dominant position by bundling Windows OS with Windows Media Player (WMP). The Commission required Microsoft to offer a version of Windows OS without WMP in addition to the bundled version. Although the allegations and the judicial tests set forth in both cases had many similarities, the courts reached contrasting resolutions. Nevertheless, both the U.S. and E.U. Microsoft cases significantly impacted their respective antitrust tying jurisprudence.

The E.U. and U.S. judicial tests for tying practices follow similar steps. Tying is anticompetitive—and therefore a violation of antitrust laws—if (1) the tying and tied products are two separate products; (2) the undertaking concerned is dominant in the market for the tying product; (3) the practice does not give customers a choice to obtain the tying product without the tied product (coercion); and (4) the practice in question forecloses competition. In the E.U., the Commission also examines the objective Justifications advanced by the defendant—however, E.U. courts generally accept the Commission’s examination and refrain from further analysis. In the U.S., courts apply a “rule of reason” standard, which weighs a defendant’s procompetitive justifications against the anticompetitive effects of the questioned practice. The following section compares and contrasts the jurisdictional approaches to this “cohesive” test through the lens of the Microsoft cases. For purposes of this Comment, it is assumed that Google is dominant in every relevant market. Thus, the second step of the test—determining whether the undertaking is dominant in the marketplace—will not be discussed.

56 United States v. Microsoft Corp. (Microsoft III), 253 F.3d 34, 34 (D.C. Cir. 2001).
57 Id.
60 Economides & Lianos, supra note 58, at 484.
61 See id.
64 See Microsoft III, 253 F.3d at 94–95.
A. Separate Products Test

The separate products test is the first step in analyzing tying arrangements in the E.U. and U.S. The central question is whether the tied or bundled goods are separate products or a single product. The separate products test serves as a screening device to exclude from antitrust scrutiny practices with obvious efficiency gains that benefit consumers. Two items may be considered a single product when they enjoy certain economies of joint production and distribution that can only be achieved by offering them as a package. The separate products test can be analyzed from a demand-side and a supply-side perspective. While the separate products test in the U.S. recognizes the presence of efficiency gains, the separate products test in the E.U. functions as a proxy for anticompetitive effects.

In the U.S., the D.C. Circuit Court of Appeals departed from the Supreme Court’s tying precedents, which relied on the separate products test as a screening mechanism for determining whether a tying arrangement was *per se* unlawful. The court stated that the rationale behind the separate products test was “a rough proxy for whether a tying arrangement may, on balance, be welfare-enhancing, and unsuited to *per se* condemnation.” Essentially, the court determined that the separate products test was “backward-looking” and failed to appreciate the net efficiencies of welfare-enhancing innovation. Accordingly, the court held that software bundles needed to be analyzed under a rule of reason standard that weighs any anticompetitive effects against the efficiency gains that may benefit consumers. Thus, the court remanded the case to the lower court, but the DOJ ultimately opted out of further litigating the issue.

In the E.U., under Article 102, “products are distinct if, in the absence of tying or bundling, from the customer’s perspective, the products are or would be purchased separately.” The Commission and E.U. courts focus the separate products inquiry on both the consumer demand and the supply-oriented character of the separate products test. However, E.U.
jurisprudence arguably has shifted from a more demand-oriented test to a supply-side analysis focused on protecting non-dominant competitors in the tied product market.77

From the consumer demand perspective, evidence of separate products includes: consumers purchasing products separately when given a choice, and firms tending to tie the products together in a competitive market.78 In Microsoft, the court ruled that “the distinctness of products . . . has to be assessed with a view to consumer demand,” and “in the absence of independent demand for the allegedly tied product, there can be no question of separate products and no abusive tying.”79 Microsoft argued that its WMP combined with its Windows PC operating system formed a single, integral product, because customers wanted to purchase the products together.80 The court rejected Microsoft’s argument because “the fact that the market provides media players separately is evidence for separate consumer demand for media players, distinguishable from the demand for client PC operating systems.”81

Significantly, the court’s analysis focused more on the supply-side, examining the existence of competing suppliers in the alleged tied product market to determine whether WMP and Windows PC operating system were distinct products.82 The court stressed that with complementary products like the Windows PC operating system and application software, “it is quite possible that customers will wish to obtain the products together, but from different sources.”83 Relying on previous CJEU case law, the court noted the presence of “independent companies specializing in the manufacture and sale of the tied product constitutes serious evidence of the existence of a separate market for that product.”84 Thus, the fact that consumers had acquired media players separately from operating systems before and after Microsoft’s introduction of WMP demonstrated that consumers regarded the products as separate.85

The court’s supply oriented approach makes sense when viewing the separate products test in conjunction with the court’s interpretation of the foreclosure of competition.86 The presence in the tied market of specialized companies indicates that there is an independent demand for the tied product

77 See id. at 522.
78 Id. at 520.
80 Id. ¶ 912.
83 Id. ¶ 922.
84 Id. ¶ 927 (internal citations omitted).
85 Id. ¶ 932.
86 See Economides & Lianos, supra note 58, at 522.
without the tying product. If competitors cannot profitably operate in the
tied product market due to the dominant undertaking’s practice, then
competition is foreclosed. The court’s supply-side analysis echoes the E.U.
concern with the exclusion of rival suppliers, which constitutes a main point
of divergence between E.U. and U.S. antitrust jurisprudence.87

B. Coercion

The second step in analyzing tying arrangements is determining
whether the tying of two distinct products precludes consumers from
choosing to obtain the tying product without the tied product. According to
Herbert Hovenkamp:

coercion should result from (1) an absolute refusal to sell the tying
product without the tied product; (2) a discount, rebate or other
financial incentive given to buyers who also take the tied product;
[or] (3) technological design that makes it impossible to sell the
tyling product without the tied product.88

The coercion test is designed to distinguish between the various forms
of tying arrangements—contractual, technological integration, or financial
incentives—and how they affect consumers.89 In both the E.U. and the U.S.,
slightly different standards may apply to each form of tying.90 Accordingly,
the E.U. and the U.S. arguably diverge in their analysis of coercion.
However, for purposes of this Comment, the potential differences in the
standards applied to each form are inconsequential. Thus, this section
primarily focuses on the E.U. interpretation of the coercion test.

A tying arrangement violates E.U. antitrust law if the dominant
undertaking does not give customers a choice to obtain the tying product
without the tied product.91 Coercion may result from a dominant undertaking
refusing to sell one product without the other through a contractual clause, a
dominant undertaking pressuring the customer to take both products through
financial incentive or favorable treatment, or a consumer’s inability to
technically remove one product from the other.92 In Microsoft, the court
stated that the coercion test is “merely expressing in different words the
concept that bundling assumes that consumers are compelled, directly or
indirectly, to accept ‘supplementary obligations,’ such as those referred to in
Article [102(d)] EC.”93

87 See id.
89 Economides & Lianos, supra note 58, at 528–29.
90 See id. at 529–32.
92 Economides & Lianos, supra note 58, at 529.
93 Microsoft, [2007] E.C.R. II–1491, ¶ 864. The court also noted the Commission
In Microsoft, the court held that Microsoft had contractually and technically coerced its customers (i.e., the manufacturers), which then passed on to the end consumers. The court found that Microsoft’s licensing system made it impossible for manufacturers to obtain a license from Microsoft to install a Windows OS without WMP. Microsoft argued that the integration of WMP with the Windows OS did not amount to coercion because customers (1) received WMP free of charge; (2) were not obligated to use WMP; and (3) could install and use competing media players. The court rejected each of Microsoft’s arguments in turn. First, the court found that WMP was not provided free of charge, but rather, its cost was included in the total price of the Windows OS. Second, the court stated that “neither Article [102(d)] 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.” Third, although manufacturers could install competing media players, the court found that they could not technically uninstall WMP. Thus, manufacturers were deterred from pre-installing other media players, which incentivized end consumers to use WMP notwithstanding the potentially “higher quality” media players offered by competitors.

E.U. antitrust law emphasizes consumer sovereignty, rather than the concept of consumer welfare. The E.U. takes the position that consumer sovereignty is preserved when the consumers can influence price, quality, and ultimately the innovative process according to their own preferences. The Microsoft court’s focus on a competitor’s ability to compete for the pre-installation of media players, and its disregard for the consumers’ ability to install alternative media players, implies a strict standard that seems to contradict the E.U.’s goal of preserving consumer sovereignty. On the one hand, Microsoft restricted the manufacturers’ choice of which media player it pre-installed on Windows OS. Theoretically, the Commission was concerned that Microsoft would not respond to consumer preferences if it could coerce the intermediaries to deny its media player competitors.

appropriately relied on Article 102(d) in its entirety because its list of supplementary obligations is not exhaustive. See id. ¶ 861.

94 Id. ¶ 963–65.
95 Id.
96 Id. ¶ 960.
97 Id. ¶ 968; but see Economides & Lianos, supra note 58, at 529 (“This argument seems paradoxical because the court had already accepted that the two products were distinct, and it should have therefore examined Microsoft’s arguments from that perspective.”).
99 Id. ¶ 971.
100 Id.
101 See Economides & Lianos, supra note 58, at 542–43.
102 See id. at 543.
However, many legitimate commercial practices have the same exclusionary effect of hindering a rival’s ability to compete. In the absence of a clear, ex ante, identification of whether a practice is illegal, companies become discouraged from introducing their innovative products to the market free of charge. A strict standard that does not consider the end consumer’s ability to obtain alternative products fails to recognize the efficiency gains—such as lower costs and higher quality inputs—that may outweigh any anticompetitive effects by allowing consumers to access the competitive market with little-to-no cost. Thus, E.U. courts should allocate weight to the efficiency gains passed on to end consumers to ensure that tying arrangements that could enhance consumer sovereignty are not cursory deemed unlawful.

C. Foreclosure of Competition

The final step in analyzing tying arrangements is determining whether the tying of two distinct products forecloses competition in the relevant market. The central question is whether the practice has an overall anticompetitive effect on competition. However, the E.U. and U.S. approaches to determining the anticompetitive effects of a practice are far from cohesive. The differences in the jurisdictional interpretations of anticompetitive foreclosure illustrate the distinct theoretical foundations of E.U. and U.S. antitrust law. There are three key points of divergence: (1) whether the foreclosure of competition requires something more than excluding or hindering competitors; (2) whether the anticompetitive effect should be presumed from the nature of the practice and the existence of a dominant undertaking; and (3) who has the burden to prove that the practice is either anticompetitive or procompetitive.

On one hand, U.S. antitrust law is not concerned with protecting competitors, but rather, competition. Accordingly, U.S. courts require more than mere evidence of competitors being harmed. Thus, the foreclosure of competition test, utilized in the U.S., weighs the anticompetitive effects of a practice with its procompetitive benefits—and

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103 See id. at 544–46.
104 Id. at 545.
105 The final step can be broken down into multiple steps, such as (1) identifying the anticompetitive effect; (2) examining the procompetitive effects or objective justifications advanced by the defendant; and (3) determining whether the anticompetitive effects outweigh the procompetitive effects. This analysis is known in United States jurisprudence as a “rule of reason” standard. See generally United States v. Microsoft Corp. (Microsoft III), 253 F.3d 34, 34 (D.C. Cir. 2001).
106 See Economides & Lianos, supra note 58, at 534.
108 Economides & Lianos, supra note 58, at 552–53.
ultimately, the plaintiff bears the burden of proof.\textsuperscript{109}

In contrast, E.U. antitrust law is concerned with protecting non-dominant firms that compete in the tied product market.\textsuperscript{110} Consequently, E.U. courts apply a quasi-per se test, which presumes the questioned practice is anticompetitive if a dominant firm engages in conduct that restricts a rival’s ability to compete.\textsuperscript{111} However, E.U. antitrust law (at least in the context of technical tying) permits the dominant undertaking to advance certain procompetitive effects to objectively justify its conduct—but ultimately, the defendant bears the burden of proof.\textsuperscript{112}

In the E.U. Microsoft case, the Commission took an unprecedented approach—similar to the approach taken by the D.C. Court of Appeals—and examined the anticompetitive effects of Microsoft’s bundling in light of its efficiency justifications and incentives to foreclose.\textsuperscript{113} The Commission stated:

[T]here are indeed circumstances relating to the tying of WMP which warrant a closer examination of the effects that tying has on competition in this case. While in classical tying cases, the Commission and the Courts considered the foreclosure effect for competing vendors to be demonstrated by the bundling of a separate product with the dominant product, in the case at issue, users can and do to a certain extent obtain third party media players through the Internet, sometimes for free. There are therefore indeed good reasons not to assume without further analysis that tying WMP constitutes conduct which by its very nature is liable to foreclosure of competition.\textsuperscript{114}

The court accepted the Commission’s application of a structured rule of reason standard, and then examined the issue of who bears the burden of proof under the analysis:

[A]lthough the burden of proof of the existence of the circumstances that constitute an infringement of Article [102] EC is borne by the Commission, it is for the dominant undertaking concerned, and not for the Commission, before the end of the administrative procedure, to raise any plea of objective justification and to support it with arguments and evidence. It then falls to the Commission, where it proposes to make a finding of an abuse of a dominant position, to show that the arguments and

\textsuperscript{109} Id. at 535–36.
\textsuperscript{110} See id. at 549–51.
\textsuperscript{111} Id. at 549.
\textsuperscript{114} Id. ¶ 841 (emphasis in the original).
evidence relied on by the undertaking cannot prevail and, accordingly, that the justification put forward cannot be accepted.115

Microsoft argued its bundling produced efficiency gains—related to distribution and the quality of its Windows Media Player content—that outweighed any of the identified anti-competitive effects.116 Microsoft claimed the Commission ignored the benefits software developers and Internet site creators received from the stable platform Microsoft created by fully integrating its media functionality in Windows OS.117 Microsoft argued that “remov[ing] [the] media functionality from the system consisting of Windows and Windows Media Player would create a series of problems to the detriment of consumers, software developers and Internet site creators . . . [and] would result in the degrading and fragmentation of that system.”118 However, the court, siding with the Commission, noted the issue was not with Microsoft’s business model of bundling, but rather, the issue was with Microsoft’s refusal to simultaneously offer “a version of [its] system without Windows Media Player, thus permitting [manufacturers] or end users wishing to do so to install the product of their choice on their client PC as the first streaming media player.”119

The Court then rejected Microsoft’s “media functionality” argument, stating:

[t]he fact that tying enables software developers and Internet site creators to be sure that Windows Media Player is present on virtually all client PCs in the world is precisely one of the main reasons why the Commission correctly took the view that the bundling led to the foreclosure of competing media players from the market.”120

The court stressed the fact that manufacturers can satisfy the consumer demand for an operating system that incorporates a streaming media player without Microsoft’s exclusivity agreement.121 Accordingly, the advantages operators received from any uniform presence did not offset the anticompetitive effects of Microsoft’s tying arrangement.122 Thus, the court affirmed the Commission’s conclusion that Microsoft’s conduct resulted in an unjustifiable foreclosure of competition.

Critically, the court did not identify any direct harm to consumers—this

116 Id. ¶ 1091.
117 Id. ¶ 1146.
118 Id. ¶ 1147 (internal quotation marks omitted).
119 Id. ¶ 1150.
121 See id. ¶¶ 1155–57.
122 Id. ¶ 1151.
is where the E.U. and U.S. theoretical approaches drastically split.\textsuperscript{123} In accordance with E.U. antitrust principles, the General Court inferred that consumers were indirectly harmed by Microsoft’s competitive alteration of the media player market.\textsuperscript{124} This stems from the E.U.’s inclination to protect competitors as a way to strengthen consumer sovereignty in the long run.\textsuperscript{125} Conversely, the dominant U.S. approach requires proof of direct consumer harm—evidenced by increased prices or reduced output in the relevant market.\textsuperscript{126} This stems from the U.S. preference to protect overall competition without chilling innovation and reducing consumer-welfare.\textsuperscript{127}

While it may seem that the E.U. approach to technological tying has shifted towards affording antitrust defendants with a legitimate opportunity to overcome the presumed foreclosure of competition, in practice, proving the existence of objective justifications remains extremely difficult.\textsuperscript{128} The low standard of proof required for anticompetitive harm, combined with the fact that the Commission does not have to prove consumers have been actually or directly harmed, makes this “structured rule of reason” standard illusory. In contrast, the rule of reason standard announced in the U.S. Microsoft case places a heightened burden of proof on plaintiffs, which ultimately dissuaded the DOJ from proceeding further against Microsoft.\textsuperscript{129} Nevertheless, the E.U. Microsoft case illustrates that the Commission, and therefore E.U. courts, may be willing to examine certain procompetitive justifications for technological tying arrangements, which arguably do not foreclose competition and instead enhance consumer-welfare. Enter Google.

IV. GOOGLE V. COMMISSIONER

A. Background

In 1996, two Stanford University PhD students, Larry Page and Sergey Brin, developed an internet search engine named Google.\textsuperscript{130} Google is now the largest search engine in the world.\textsuperscript{131} In 2005, Google acquired Android, Inc., the start-up that initially developed the Android operating system to

\textsuperscript{123} Economides & Lianos, supra note 58, at 557–58.

\textsuperscript{124} Id.

\textsuperscript{125} See id. at 558.

\textsuperscript{126} Id.

\textsuperscript{127} See United States v. Microsoft Corp. (Microsoft III), 253 F.3d 34, 89 (D.C. Cir. 2001).

\textsuperscript{128} Economides & Lianos, supra note 58, at 551.

\textsuperscript{129} See Microsoft III, 253 F.3d at 95.


coordinate the hardware and software functions of mobile devices. In 2008, Google entered the mobile device industry with its release of the first Android-operated mobile device—the HTC Dream. Android is Google’s operating system (OS) for mobile devices. Android is an open-source platform, which Google licenses free of charge to manufacturers of mobile devices (“manufacturers” or “customers”), developers of mobile applications, or any end user (“consumers”). Google also develops a variety of mobile apps that allow consumers to manage their mobile devices. Google’s most important app, Google Play, functions as a storefront for users to download other Google apps, as well as third-party apps—the vast majority of which are available for free. Google’s proprietary apps—e.g., Google Play, Google Maps, Gmail, YouTube, and Google Calendar—can be found on virtually all Android-operated mobile devices. Google permits manufacturers to pre-install a suite of proprietary apps—called Google Mobile Services (GMS)—on their mobile devices. Manufacturers, such as Samsung, receive GMS for free if they accept the conditions in Google’s Mobile Application Distribution Agreement (MADA).

Like many technology-based business models, Google operates in a multisided market. A multisided market is a market “in which one or several platforms enable interactions between end-users and try to get the two (or multiple) sides ‘on board’ by appropriately charging each side.” On one side, Google’s market consists of smartphone and tablet owners who use mobile apps; the other sides consist of advertisers, app developers, and mobile device manufacturers. It is common practice for businesses operating in a multisided market to charge different prices to the different sides of the market. For example, while Google offers its apps for free to consumers, it collects fees from advertisers. Google attracts users by offering its apps for free. The more app users Google can attract, the more

132 See Cheng, supra note 2.
133 Id.
134 Id.
135 Id.; see also Walker, supra note 1.
136 Sidak, supra note 68, at 621.
137 See id. at 659–60.
138 See id.
139 Id. at 660.
140 See id. at 669.
142 Sidak, supra note 68, at 662.
143 See id.
144 See id. at 662–64.
145 Id. at 663.
revenue Google generates from its mobile advertising.\textsuperscript{146} Advertising revenues then allow Google to recoup its investments in Android OS and mobile apps.\textsuperscript{147} Thus, Google’s practice of offering Android, Google apps, and GMS free of charge enables Google to attract consumers, develop competitive products, and increase profits through mobile advertising.\textsuperscript{148}

B. The Commission’s Statement of Objections and Google’s Response

On April 20, 2016, the European Commission (the “Commission”) sent Google a Statement of Objections announcing its “preliminary view that Google has implemented a strategy on mobile devices to preserve and strengthen its dominance in general internet search.”\textsuperscript{149} In its Statement of Objections, the Commission alleges: (1) that Google unlawfully tied its Google Search and Google Chrome browser with its other proprietary apps, namely the Google Play Store; and (2) that Google unlawfully tied its Android OS to its proprietary apps, namely the Google Play Store and Google Search.\textsuperscript{150} The Commission is concerned that Google’s practices: (1) allow Google to abuse the dominant position of Google Search in general internet search services; (2) “affect the ability of competing mobile browsers to compete with Google Chrome;” and (3) “hinder the development of operating systems based on the Android open source code and the opportunities they would offer for the development of new apps and services.”\textsuperscript{151} Moreover, the Commission asserts Google’s conduct harms consumers by narrowing their choice of products and services, and stifling competition in the market.\textsuperscript{152}

The Commission also alleges that Google’s dominant position is protected by certain barriers to entry and by the significant costs—associated with losing their current apps, data, and contacts—that consumers, i.e., Android users, face if they wish to switch operating systems.\textsuperscript{153} For example, in the market for Android app stores, Google’s “Play Store accounts for more than 90% of apps downloaded on Android devices in the [European Economic Area].”\textsuperscript{154} The Commission argues that Google’s dominance is protected by the unavailability of downloadable app stores from the Play Store and the fact that consumers generally would not switch to other app

\textsuperscript{146} Id.
\textsuperscript{147} Id. at 664.
\textsuperscript{148} Sidak, supra note 68, at 664.
\textsuperscript{149} Statement of Objections, supra note 4.
\textsuperscript{150} Id.
\textsuperscript{151} Id.
\textsuperscript{152} Id.
\textsuperscript{153} Id.
\textsuperscript{154} Commission Fact Sheet, MEMO/16/1484 (Apr. 20, 2016) [hereinafter Fact Sheet].
stores because they would have to purchase a new device and would face significant switching costs.\textsuperscript{155}

The Commission is concerned that “by reducing manufacturers’ incentives to pre-install competing browser apps and consumers’ incentives to download those apps, competition in both mobile browsers and general search has been adversely affected.”\textsuperscript{156} Accordingly, the Commission stated that it “seeks to ensure that manufacturers are free to choose which apps they pre-install on their devices.”\textsuperscript{157} The Commission is also concerned that the anti-fragmentation agreements have denied consumers access to innovative operating systems.\textsuperscript{158} In support, the Commission noted that Android is an open-source system that is supposed to allow anyone to freely develop their own modified mobile operating system.\textsuperscript{159} The Commission stated that while “EU antitrust rules allow dominant companies to put in place restrictions only when they are objectively justified . . . to date, Google has not been able to show this in relation to the restrictions in the ‘Anti-Fragmentation Agreements.’”\textsuperscript{160} Apparently, “the Commission has evidence that the exclusivity condition affected whether certain device manufacturers and mobile network operators pre-installed competing search services.”\textsuperscript{161} If the Commission’s charges are upheld, Google could face a fine of up to ten percent of its annual turnover, which is close to $7.5 billion.\textsuperscript{162}

C. Distinguishing Google’s Conduct from the Microsoft Case

There are three significant differences between Google’s alleged tying arrangement and the bundling practice found unlawful in Microsoft. First, there is a strong argument that Google’s mobile suite is a single product offered for pre-installation—rather than a bundle of distinct proprietary apps. Second, Google offers all its products—the Android OS and its proprietary apps—to customers free of charge. Third, Google offers its Android OS without forcing customers to pre-install its apps. The following analysis attempts to show how these unique factors raise substantial issues with the Commission’s case under the General Court’s approach in Microsoft.

\textsuperscript{155} Statement of Objections, supra note 4.
\textsuperscript{156} Id.
\textsuperscript{157} Fact Sheet, supra note 154.
\textsuperscript{158} Id.
\textsuperscript{159} See id.
\textsuperscript{160} Id.
\textsuperscript{161} Statement of Objections, supra note 4.
i. Separate Products Test

Google offers a suite of its proprietary apps ("GMS") that mobile device manufacturers can pre-install on Android-run devices.163 The issue is whether GMS is a bundle of separate products or a single product. The Commission views the apps, such as the Play Store and Google Search, as separate products.164 But are these products separate? Google can, should, and most likely will argue that the suite of apps offered for pre-installation are not an aggregation of separate products, but rather a single product.

Certainly, there is an independent demand for each proprietary app.165 However, GMS represents an entirely new market in which companies compete for manufacturers to pre-install their suite of mobile apps.166 From a demand-side perspective, the Commission argues that if given the choice, manufacturers generally would pre-install an app store, a search engine, and a web browser separately.167 Yet, this ignores that manufacturers may prefer to acquire and pre-install a mobile suite because obtaining each app individually would significantly increase their search and transaction costs.168

From a supply-side perspective, the Commission argues that rival search engines and browsers are unable to become the default services because Google Search and Chrome are tied to the Play Store.169 However, unlike Microsoft’s bundling of its WMP and PC operating system where the cost of WMP was included in the overall cost of manufacturers installing the operating system, the cost of pre-installing Google Search and Chrome are not reflected in the cost of licensing Google’s Play Store—manufacturers acquire the complete GMS for free.170 Moreover, Google’s mobile suite product does not compete with the suppliers of individual apps. Rather, it competes with other companies that offer manufacturers a mobile suite of apps for pre-installation, such as Yandex171 and Microsoft. If companies offering mobile suites, like Google, are required to license their proprietary

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163 Sidak, supra note 68, at 660.
164 See generally Statement of Objections, supra note 4.
165 For example, there is a demand for search engines separate from Internet browsers. A consumer may use Google Search on her iPhone, but prefer to use Safari Browser to "surf" the web.
166 Sidak, supra note 68, at 680.
168 See Sidak, supra note 68, at 680.
170 See Walker, supra note 1.
apps separately, then the market for mobile suites will no longer exist.

The argument that GMS is a single-product is ironically bolstered by the Commission’s second allegation that Google unlawfully conditions the pre-installation of its proprietary apps on manufacturers exclusively using Google’s Android OS. Nevertheless, the Commission’s concern with Google tying its Android OS (tied product) with the pre-installation of its proprietary apps (tying product) is well supported by the separate product test. Google’s “Anti-Fragmentation Agreements” require that manufacturers agree to not sell modified Android operating systems (“Android forks”) if they want to pre-install GMS. Under the separate products test, there is no distinguishing factor between Google’s practice and Microsoft’s bundling of its operating system with its media player. However, the separate products test does not end the anticompetitive inquiry. Thus, the following discussion will focus on Google’s bundling of Android OS and GMS.

ii. Coercion

The Commission alleges that manufacturers do not have a choice to obtain GMS (tying product) without agreeing to use Android OS (tied product). A tying arrangement violates EU antitrust law if the dominant undertaking does not give customers a choice to obtain the tying product without the tied product. The issue is whether Google’s practice compels consumers, directly or indirectly, to accept supplementary obligations that affect consumer sovereignty.

Factually, this is the opposite of the tying arrangement in Microsoft. In Microsoft, the tying product was Windows OS and the tied product was WMP. The Microsoft court was concerned with protecting the competing media player suppliers in order to maintain consumer sovereignty. Essentially, consumer sovereignty was impaired because Microsoft’s practice eliminated consumers’ ability to influence the price, quality, and innovative process according to their own preferences. Here, the Commission is concerned with protecting companies that compete to offer Android forks. Specifically, the Commission asserts that Google’s conduct “prevent[s] manufacturers from selling smart mobile devices based on a competing Android fork which had the potential of becoming a credible

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172 Statement of Objections, supra note 4.
173 Id.
176 See id at 887.
177 Economides & Lianos, supra note 58, at 542–43.
178 Id. at 543.
179 Statement of Objections, supra note 4.
alternative to the Google Android operating system.”

However, Google’s conduct ultimately does not hinder consumer choice. Google offers both Android OS and GMS free of charge. Google does not require manufacturers to pre-install GMS in exchange for its Android operating system—“GMS and Android are not interdependent.” For example, Amazon’s Fire smartphone and Nokia’s X smartphone operate on the Android OS but do not come pre-installed with GMS. Moreover, manufacturers and consumers can obtain Google Search and Chrome on mobile devices that do not operate on Android OS. Although manufacturers cannot pre-install these apps, consumers ultimately decide which search engines and browsers they want to use regardless of what operating system they have. Unlike Microsoft’s WMP—which was impossible to uninstall—an Android user is free to uninstall Google Search and Chrome and replace them with alternative apps. Although the court in Microsoft applied a strict coercion test to preserve consumer sovereignty (or at least in theory), Google’s conduct does not affect the ability of consumers to influence the price, quality, and innovative process according to their preferences.

iii. Foreclosure of Competition

The most important issue in the Commission’s case against Google is whether tying the Android OS to GMS forecloses competition in the market for mobile phone operating systems. E.U. antitrust law is concerned with protecting competitors because a dominant undertaking’s alteration to the competitive structure indirectly harms consumers. In Microsoft, the court’s main concern was with Microsoft’s refusal to offer an operating system without WMP. This effectively foreclosed competition in the media player market because manufacturers—and therefore

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180 Id.
181 See Aleksandra Eriksson, Google rejects EU antitrust charges on Android, EUOBSERVER (Nov. 10, 2016, 5:56 PM), https://euobserver.com/economic/135865 (quoting Daniel Castro, the Vice President of the Information Technology and Innovation Foundation, “[t]he root of the problem with EU regulators’ complaints is that they are relying on outdated economic theories. They do not seem to understand that innovation-based industries, like mobile operating systems, operate differently than conventional industries.”).
182 See Walker, supra note 1; see also Sidak, supra note 68, at 657–61.
183 Sidak, supra note 68, at 660.
184 Id. at 660–61.
185 Id. at 659; see also Geoffrey Manne, The EU’s Antitrust Complaints Are Contrived, WIRED (Nov. 20, 2016, 7:00 AM), https://www.wired.com/2016/11/eus-android-antitrust-complaints-contrived/.
186 See Walker, supra note 1; see also Manne, supra note 185.
187 See Economides & Lianos, supra note 58, at 557.
consumers—could not obtain Windows OS without pre-installing WMP.\footnote{Id.}

The Commission’s case against Google is lacking a comparable distortion of the competitive structure.

The first issue is that the Commission ignores a significant portion of Google’s competitors. Google competes with closed operating systems such as Apple iOS and Windows Phone OS.\footnote{See Walker, supra note 1; see also Sidak, supra note 68, at 658–59.} In Google’s response to the Statement of Objections, Google stated that “[t]o ignore competition with Apple is to miss the defining feature of today’s competitive smartphone landscape,” and cited to the Commission’s own market survey in which eighty-nine percent of respondents confirmed that Apple and Android are competitors.\footnote{Walker, supra note 1.} Unlike Android, Apple iOS is exclusively available on Apple’s mobile devices.\footnote{See Walker, supra note 1; see also Sidak, supra note 68, at 658.} Windows Phone OS is also a closed operating system.\footnote{Id.} By ignoring competitors such as Apple and Microsoft in the operating system market, and focusing solely on Android fork operating systems, the Commission essentially favors closed-source over open-source platforms.\footnote{Id.}

The second issue with the Commission’s narrow market approach is that the competitors, i.e., suppliers of Android forks, are only able to develop Android forks and compete with Android because Google created the open-source Android platform. Google can distribute Android OS and its proprietary apps free of charge because it “lowers prices for phone makers and consumers, while still letting [Google] sustain [its] substantial investment in Android and [Google] Play.”\footnote{Walker, supra note 1.} The more app users Google attracts, the more revenue Google generates from its mobile advertising. Advertising revenues then allow Google to recoup its investments in Android and mobile apps. Thus, Google’s practice of offering Android, Google apps, and GMS free of charge enables Google to attract consumers, develop competitive products, and increase profits through mobile advertising. If Google cannot recover its investments in Android and mobile apps, then it will no longer be able to provide the open-source platform that enables competitors to develop Android forks in the first instance. The result: “less innovation, less choice, less competition, and higher prices.”\footnote{Id.}

Unfortunately, the cost of the Commission’s case will not fall on the manufacturers, but rather, the end consumers.\footnote{See Manne, supra note 185 (noting that if the Commission’s case is enforced, Google...}
V. CONCLUSION

If the Commission drafts a decision prohibiting Google’s business practices and that decision is formally adopted, then Google should appeal the decision to the General Court. The General Court should then proceed cautiously and analyze Google’s alleged unlawful tying arrangement under a rule of reason standard to determine whether the anticompetitive effects outweigh the pro-competitive effects of Google’s practice. Google’s conduct does not foreclose competition by its very nature. Rather, Google invites and encourages competition by offering its Android OS as an open-source platform. Moreover, Google’s conduct enhances consumer welfare by lowering prices and promoting innovation, all while preserving consumer sovereignty. While Google may still bear the ultimate burden of proving the procompetitive effects of its conduct outweigh the anticompetitive effects, the General Court should refrain from blindly following the Commission’s findings. The fact that Google offers all its products free of charge combined with the fact that end consumers can easily uninstall any of Google’s mobile apps, clearly distinguishes Google’s conduct from Microsoft’s unlawful bundling practice. An E.U. court presented with the Commission’s case against Google should not feel restrained by current antitrust jurisprudence because the unique circumstances certainly “warrant a closer examination of the effects that tying has on competition.”

Look down at your phone. Unlock the home screen. Now imagine Google Search, Chrome Browser, and the Play Store no longer appear. Instead, your phone manufacturer insists you download these apps for a fee. Are you satisfied?

will have to charge licensing fees to pre-install apps, and the costs will ultimately be passed on to end consumers in the form of higher mobile device prices).
