BEHAVIOURAL MARKET FAILURES IN ANTITRUST – TOWARDS "WORKABLE" COGNITIVE FORECLOSURE

Peter O'Loughlin[*]

Abstract

Both Google Android and Google Search (Shopping), along with other ongoing digital market antitrust enforcement actions like United States v. Google LLC, are based on foreclosure conduct that has raised difficult doctrinal questions for courts, regulators, and scholars. This emerging form of foreclosure, which some have termed "cognitive foreclosure" because of its behavioural economic foundations, has encountered difficulties in being conceptually subsumed under existing antitrust frameworks. Yet as a demand-side market failure, enforcers and scholars must be cautious about automatically categorising these market failures as antitrust issues, given that such market failures are usually governed by the more de-minimis consumer protection regime. This Article proffers a new legal test to aid courts and regulators in appropriately "identifying" behavioural market failures that would justify antitrust scrutiny. The test's limits are subsequently justified from moral hazard perspectives given the potential reduction in societal rationality due to antitrust over-enforcement.

[*] Assistant Professor/ Lecturer, University of Galway.

INTRODUCTION

The recent *Google Android*[1] and *Google Search (Shopping)*[2] judgments, along with the ongoing United States Department of Justice's (US DOJ) case against Google,[3] have brought to the fore the demand-side of markets as a target for potentially anti-competitive foreclosure strategies. Indeed, these cases are either explicitly or implicitly grounded on behavioural economic (BE) theories of harm and, therefore, can be conceived of as behavioural market failures. Specifically, because of (1) Google's conduct altering the choice architecture[4] of its search engine and (2) the pre-installation of its own services as the default on mobile devices[5] and on web browsers,[6] consumers seem to fall foul to less than rational decision-making, which dilutes their capacities to switch to rival websites and/or applications. Such conduct has been termed "cognitive foreclosure," which depicts digital platforms as uniquely and powerfully positioned to manipulate consumers' cognitive biases, increase the spectre of *irrational* decision-making, and

---

[1] Case T-604/18, Google LLC v. Comm'n, 2022 ECLI:EU:T:2022:541 [hereinafter *Google Android*] (under appeal Case C-738/22, Google & Alphabet v. Commission).

[2] Case T-612/17, Google LLP v. Comm'n, ECLI:EU:T:2021:763 [hereinafter *Google Search (Shopping)*] (under appeal Case C-48/22, Google Shopping).

[3] Amended Complaint, United States v. Google LLC, No. 1:20-cv-03010 (D.D.C. Jan. 15, 2021); Memorandum Opinion, United States v. Google LLC, No. 1:20-cv-03010-APM (D.D.C. Oct. 6, 2023); *see also* David McCabe and Cecilia Kang, *A Monopolist Flexing: U.S. Blasts Google's Tactics as Antitrust Trial Opens*, N. Y. TIMES (Sept. 12, 2023), https://www.nytimes.com/live/2023/09/12/business/google-antitrust-trial#google-monopoly-antitrust-trial.

[4] Case T-612/17 *Google Search (Shopping)*, ECLI:EU:T:2021:763, ¶182 ("It is apparent from the file that, historically, Google initially provided general search services and acquired a 'superdominant' position on that market, which is characterised by very high barriers to entry. On that market, Google displayed results that directed users to comparison shopping services. Furthermore, Google displayed all the results of specialised search services in the same way and according to the same criteria. The very purpose of a general search service is to browse and index the greatest possible number of web pages in order to display all results corresponding to a search"); *id.*, at ¶ 184 ("According to the Commission, after Google's launch on the market for specialised comparison shopping search services and after experiencing the failure of its dedicated comparison shopping web page (Froogle), Google changed its practices on the market for general search services which it dominated, the effect of which was to increase the visibility of results from its own comparison shopping service on the general search results pages. After the launch of grouped product results, comparison shopping services were no longer all treated in the same way. Google promoted its own specialised search results (positioning and display) and demoted the results of its competitors which, moreover, were not afforded the same type of display (only 'blue links' without images or rich text). The change in Google's behaviour led to a reduction in the visibility of results from competing comparison shopping services and, at the same time, increased the visibility of results from Google's own comparison shopping service. Thus, the practices at issue enabled Google to highlight its own comparison shopping service on its general search results pages while leaving competing comparison shopping services virtually invisible on those pages, which, in principle, is not consistent with the intended purpose of a general search service"). *See also* Richard H. Thaler, Cass R. Sunstein & John P. Balz, *Choice Architecture*, *in* THE BEHAVIORAL FOUNDATIONS OF PUBLIC POLICY 428-39 (Eldar Shafir ed., 2013).

[5] Case T-604/18 *Google Android*, ECLI:EU:T:2022:541, ¶ 326-38.

[6] Amended Complaint, United States v. Google LLC, No. 1:20-cv-03010-APM (D.D.C. Jan. 15, 2021) 3 ("For a general search engine, by far the most effective means of distribution is to be the preset default search engine for mobile and computer search access points. Even where users can change the default, they rarely do.").

distort switching incentives and abilities.[7] The consequence is a potential solidification of market power because of foreclosure of competition from the demand-side.

These emerging forms of demand-side foreclosure, however, have raised concerns for scholars because the conduct at issue does not seem to conceptually fit into one of the established categories of abuse.[8] Whilst there seems to be a degree of consensus that Google has acted in some sense nefariously, the conduct at issue has been a challenging conceptual fit into existing antitrust doctrine.[9] Scholars have debated, for example, whether the conduct at issue—which has, in certain contexts, come to be known as "self-preferencing"—is an abusive refusal-to-supply, abusive tying, abusive leveraging, and/or discrimination.[10] Yet on one view the awkward conceptual fit of this conduct into all of these doctrines may be unsurprising, due to their orientation towards supply-side foreclosure. In short, existing antitrust doctrines focus on orthodox supply-side market failures when the conduct at issue in *Google Search (Shopping)*, for example, was a market-failure stemming from the demand-side.[11]

This raises an issue for antitrust enforcement in moving towards a workable test for judges and regulators to resolve these emerging forms of demand-side foreclosure arising from behavioural market failures. This is because the demand-side of antitrust, including the concepts of demand-substitutability and price elasticity, has had a thorny and fragmented life, not least because of the symbiosis between consumer protection law, on the one hand, and antitrust law, on the other.[12] So perhaps it is unsurprising, then, that when scholars have displayed anxieties about the concept of market power expanding too broadly for antitrust enforcement purposes—that is, when they have been concerned about whether certain kinds of market imperfections should be treated as antitrust market power[13]—it has almost always been in demand-side contexts. It therefore may be equally unsurprising that the conduct at issue in *Google Search (Shopping)* and *United States v. Google*

---

[7] *See* Peter O'Loughlin, *Cognitive Foreclosure*, 38 GA. ST. U. L. REV. 1097 (2022).

[8] *See infra* Part II.

[9] *See infra* Part II.

[10] *See infra* Part II.

[11] *See* Case T-612/17, Google LLP v. Comm'n, ECLI:EU:T:2021:763, under appeal Case C-48/22 *Google Shopping*.

[12] *See* Joshua Wright, *The Antitrust/Consumer Protection Paradox: Two Policies at War With Each Other*, 121 YALE L. J. 2216 (2012); Neil W. Averitt & Robert H. Lande, *Consumer Sovereignty: A Unified Theory of Antitrust and Consumer Protection Law* 65, ANTITRUST L. J. 713 (1997).

[13] The term "antitrust market power" is used in the same sense as Arthur. *See* Thomas Arthur, *The Costly Quest for Perfect Competition: Kodak and Nonstructural Market Power*, 69 N. Y. U. L. REV. 1, 5, n.8 (1994) (using the term "antitrust market power" "to refer to the market power recognized by antitrust courts as satisfying the market power element of an antitrust offense").

LLC,[14] for instance, presents difficulties for antitrust doctrine if it belongs to a category of market failures renowned for blurring the line between antitrust and consumer protection.

The issue is whether these demand-side market frictions generate the *kind* of market power that antitrust should concern itself with, which some have defined as meaning "substantial" and "sustainable" market power.[15] This is because if market power is taken to mean simply the ability to price above marginal cost, then almost all firms possess *some* degree of market power because their demand curves will not resemble the stylised world of perfect competition—where price equals marginal cost and the demand curve is horizontal[16]—but rather will be (at the very least slightly) downward sloping.[17] Thus, even trivial consumer foibles—that is, even small deviations from consumer perfection— could generate some market power, but whether they generate antitrust market power[18] is the key question and will be determinative for triggering antitrust scrutiny.[19] Both *Google Android* and *Google Search (Shopping)* have been appealed to Europe's apex court, the Court of Justice of the European Union (CJEU),[20] and the *United States v.*

---

[14] *See* Memorandum Opinion, United States v. Google LLC, No. 1:20-cv-03010-APM 31 (D.D.C. Oct. 6, 2023) 31 (arguing that Google's agreements are not technically exclusive—because in principle users can change default settings—but rather may be *de facto* exclusive).

[15] *See, e.g.,* George A. Hay, *Market Power in Antitrust*, 60 ANTITRUST L.J. 807, 817–819 (1992); William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937, 937 (1981) ("A finding of monopolization in violation of section 2 of the Sherman Act requires an initial determination that the defendant has monopoly power – a high degree of market power"); Arthur, *supra* note 13, at 26–32.

[16] Gregory J. Werden, *Demand Elasticities in Antitrust Analysis*, 66 ANTITRUST L.J. 363, 370 (1998) ("The competitive firm maximizes profit just as the monopolist, but it faces a different demand curve. The competitive firm is a price taker; it can sell at the market price all it can produce, but it cannot affect that price by changing its output. Thus, the competitive firm faces an *infinitely elastic* demand curve throughout the relevant range, i.e., a demand curve that is a horizontal line") (emphasis added). *See also* DENNIS CARLTON & JEFFREY PERLOFF, MODERN INDUSTRIAL ORGANIZATION 738 (1989).

[17] Hay, *supra* note 15, at 812-814 (comparing various definitions of market power and concluding that they are "not very useful for antitrust purposes" because defining market power as the ability to raise price above competitive levels will apply to "*any* firm facing a downward sloping demand curve, no matter how slight the slope (i.e. no matter how elastic the demand curve)") (emphasis in original); *see also* Werden, *supra* note 16, at 370 ("A firm lacks market power if it faces an infinitely elastic demand curve, and a firm possesses market power if it faces a downward sloping demand curve"); *id.* at 371 ("[T]he vast majority of firms *have at least a little* market power. In particular, every seller of a product that is differentiated with respect to any relevant dimension almost certainly has some market power") (emphasis added); Landes & Posner, *supra* note 15, at 939 ("Under perfect competition, price equals marginal cost, so if a firm's price is above its marginal cost, the implication is that the firm does not face perfect competition, *i.e.*, that it has at least some market power"); PHILLIP AREEDA, LOUIS KAPLOW & AARON EDLIN, ANTITRUST ANALYSIS: PROBLEMS, TEXTS, AND CASES 339 (4th ed. 2015) ("[Market power] is possessed to some degree by every firm that is not constrained by perfect competition.").

[18] *See* Hay, *supra* note 15, at, 81 ("[M]arket power for antitrust purposes should refer to a situation in which a firm or group of firms is able to profitably maintain prices *significantly* above the competitive level for a *sustained* period of time, thereby earning supranormal economic profit") (emphasis in original); *see also* Benjamin Klein, *Market Power in Antitrust: Economic Analysis After Kodak* 3, SUP. CT. ECON. REV. 43, 71-75 (1993).

[19] This is a legal question, whereby once antitrust law determines that antitrust market power exists, the behaviour of the defendant firm would then need to be more closely examined.

[20] Case C-738/22 P, Google LLC v. Comm'n, ECLI:EU:C:2023:326 (GC Apr. 18, 2023); Case C-48/22,

Google LLC judgment is expected in 2024.[21] The courts in these cases face conceptual difficulties in identifying this emerging form of foreclosure under established antitrust doctrine. In particular, the courts will have to reject or accept the legal characterisations of the conduct at issue.

This Article argues that these and other legal characterisations should be rejected because they seek to resolve a demand-side market failure with supply-side doctrines. The Article consequently proffers a new test for this emerging form of demand-side foreclosure – one that limits antitrust intervention for cognitive foreclosure constituting only a "substantial" and "sustainable" deviation from perfect competition. Otherwise put, behavioural market failures, if they are to justify antitrust scrutiny, must have the capacity for damaging entire markets non-transiently. The limits imposed in this test are then justified from the underexplored policy perspective of consumer moral hazard,[22] which contrasts with the traditional supply-side fulcrums for demarcating the consumer protection/antitrust boundary.

The Article unfolds as follows. Part I illuminates the scholarly anxiety associated with the concept of "market power" expanding too broadly and how this anxiety has almost always been a function of demand-side market failures.[23] More specifically, behavioural market failures—which are demand-side market failures—will be shown to have contingent capacities for damaging aggregate demand non-transiently because they (a) belong to a category of market failures which are infamous in this respect and (b) empirically this in fact seems to be the case – that is, *irrationality*, given its heterogeneous distribution across society, will not be *either* a consumer protection or antitrust issue but rather one or the other contingent upon the circumstances.[24] Part II demonstrates how behavioural market failures in the form of cognitive foreclosure have been doctrinally misidentified and how the supply-side orientation of existing antitrust doctrine renders it inappropriate for resolving behavioural market failures.[25] Part III identifies cognitive foreclosure by putting forward a workable legal test that may aid judges and regulators in addressing these kinds of demand-side market failures going forward.[26] Part IV justifies the test from the underexplored policy perspective of moral hazard.[27]

Google LLC v. Comm'n, ECLI:EU:C:2024:14 (GC Nov. 1, 2024).

[21] *See* Memorandum Opinion, United States v. Google LLC, No. 1:20-cv-03010-APM (D.D.C. Oct. 6, 2023).

[22] *See generally* Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941 (1963).

[23] *See infra* Part I.

[24] *See infra* Part I.

[25] *See infra* Part II.

[26] *See infra* Part III.

[27] *See infra* Part IV.

I. BEHAVIOURAL MARKET FAILURES AS COMBINED CONSUMER PROTECTION/ANTITRUST ISSUES

The legal concept of "market power" is one that has generated an important debate in antitrust. As indicated at this Article's outset, a nuanced but no less significant question has been whether certain kinds of market power are the kinds that warrant antitrust scrutiny.[28] Ambiguity exists as to when deviations from perfect competition should confer antitrust market power (although some scholars have attempted to delineate criteria for identifying the latter).[29] For instance, scholars argue that something more is required than a simple deviation from perfect competition because antitrust can be a costly regulatory tool and an inclusion of every deviation from perfection would result in an undue– expansion of antitrust enforcement.[30] As Thomas Arthur explains, "[t]he real question is legal, not economic: does the defendant possess the kind of and degree of market power that antitrust law is intended to regulate?"[31]

The reason for reticence in expanding the market power concept too broadly for antitrust enforcement purposes is because if market power is taken to mean simply the ability to price above marginal cost, then almost all firms possess *some* degree of market power: their demand curves will not resemble the stylised world of perfect competition—where price equals marginal cost and the demand curve is horizontal[32]—but rather will be at least somewhat downward sloping.[33] Thus, even trivial consumer weaknesses, for

---

[28] *See, e.g.,* Arthur, *supra* note 13; Hay, *supra* note 15; Klein, *supra* note 18, at 43; Mark A. Lemley & Mark P. McKenna, *Is Pepsi Really a Substitute for Coke - Market Definition in Antitrust and IP*, 100 GEO. L.J. 2055 (2012).

[29] *See, e.g*., Arthur, *supra* note 13.

[30] *See, e.g.*, AREEDA ET AL., *supra* note 17, at 484 ("Nearly any departure from perfect competition implies some market power. Thus, whenever the antitrust laws require a showing of market power, the courts must make a judgment of degree"); Arthur, *supra* note 13; Herbert Hovenkamp, *Post-Chicago Antitrust: A Review and Critique*, 2001 COLUM. BUS. L. REV. 257, 304-11 (discussing the concept of "relational market power" as it relates to franchise agreements and concluding that "calling this kind of control 'market power' is not merely legally incorrect, it is also extremely dangerous as a policy matter. It threatens to turn antitrust into an engine for the resolution of all kinds of disputes over long-term contracts, or worse yet, to use antitrust as a device for protecting people from their own carelessness in bargaining").

[31] Arthur, *supra* note 13, at 25.

[32] Werden, *supra* note 16, at 370 ("The competitive firm maximizes profit just as the monopolist, but it faces a different demand curve. The competitive firm is a price taker; it can sell at the market price all it can produce, but it cannot affect that price by changing its output. Thus, the competitive firm faces an *infinitely elastic* demand curve throughout the relevant range, i.e., a demand curve that is a horizontal line") (emphasis added).

[33] *See* Hay, *supra* note 15, at 812–14 (comparing various definitions of market power and concluding that they are "not very useful for antitrust purposes" because defining market power as "the ability to raise price above competitive levels" will apply to "*any* firm facing a downward sloping demand curve, no matter how slight the slope (i.e. no matter how elastic the demand curve") (emphasis in original). *See also* Werden, *supra* note 16, at 370 ("A firm lacks market power if it faces an infinitely elastic demand curve, and a firm possesses market power if it faces a downward sloping demand curve"); *id.* at 371 ("[T]he vast majority of firms *have at least a little* market power. In particular, every seller of a product that is differentiated with respect to any relevant dimension almost

example—that is, even small departures from perfect consumer decision-making—could generate some market power, but whether they generate *antitrust* market power[34] is what is at stake.

This section briefly sketches the academic discourse on when market power should be antitrust market power – highlighting how such discourse has largely stemmed from, and been motivated by, demand-side imperfections.[35] It then argues that behavioural market failures—like the ones in *Google Search (Shopping)* and *Google Android*—should be treated with the same caution because they (1) fall into the category of demand-side market failures and (2) empirical evidence reveals heterogeneous distributions of *irrationality*, which demonstrates the need for nuance when assessing their suitability as antitrust issues.[36]

A. "Antitrust" Market Power – demand-side triggers of scholarly anxiety

1. Kodak

Perhaps the most potent trigger of scholarly anxiety regarding perceived undue antitrust market power expansions is the US Supreme Court's *Kodak* case.[37] Various commentaries took issue with *Kodak*—the crux of which concerned consumers' capacities to exercise their competitive constraints—because commentators viewed it as a case concerning a kind of market power that did not deserve to come within the circumference of antitrust market power.[38]

For example, Arthur argued that "[t]he market power which results from…non-structural, market imperfections, such as those identified in *Kodak*, is fundamentally different in both degree and kind, and thus not sufficiently substantial to justify antitrust regulation."[39] Benjamin Klein, reasoning in a similar vein about the potential undue expansion of antitrust liability arising from *Kodak*, concluded that "[o]pening up an antitrust investigation to a study of buyers' expectations and giving weight to survey

---

certainly has some market power.") (emphasis added); Landes & Posner, *supra* note 15, at 939 ("Under perfect competition, price equals marginal cost, so if a firm's price is above its marginal cost, the implication is that the firm does not face perfect competition, i.e., that it has at least some market power").

[34] Hay, *supra* note 15, at 814 ("[M]arket power for antitrust purposes should refer to a situation in which a firm or group of firms is able to profitably maintain prices *significantly* above the competitive level for a *sustained* period of time, thereby earning supranormal economic profit") (emphasis in original). *See also* Klein, *supra* note 18, at 71-85.

[35] *See infra* Section I.a.

[36] *See infra* Section I.b.

[37] Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 US 451 (1992).

[38] *Id.*

[39] Arthur, *supra* note 13, at 6.

evidence opens a Pandora's Box that makes it essentially impossible for sellers to protect themselves against antitrust liability."[40] Other scholars reached similar conclusions – that *Kodak* was a case risking an adventurous expansion of the concept of market power for antitrust enforcement purposes.[41]

2. Product differentiation

Product heterogeneity[42] is another demand-side example that has generated scholarly concerns about undue expansions of "antitrust" market power.[43] Scholars in this setting argue against the inclusion of product differentiation as a source of "antitrust" market power for several reasons—for example, such market power is derived not from a lack of competition but by successfully winning the hearts and minds of consumers[44] or how sellers of such differentiated products are actually subject to "reasonably close substitutes" and are social-welfare enhancing.[45] Others are more persuaded by product differentiation's capacity to confer significant market power—both generally[46] and more specifically in intellectual-property contexts.[47]

---

[40] Klein, *supra* note 18, at 87. *See also id.* (concluding that "[a]sking transactors what they thought their contract terms meant and what risks they believed they assumed seems clearly to be a question for contract law rather than for antitrust").

[41] *See e.g.*, Michael S. Jacobs, *Market Power Through Imperfect Information: The Staggering Implications of Eastman Kodak Co. v. Image Technical Services and a Modest Proposal for Limiting Them*, 52 MD. L. REV. 336, 373 (1993) ("*Kodak* is arguably the most important antitrust decision of the past twenty years. Unfortunately, it is a disaster. By changing the traditional approach to market power analysis and discarding the market share proxy in cases involving markets with significant information gaps, the Supreme Court has effectively decided *every* firm may possess market power, regardless of its market share") (emphasis added).

[42] *See e.g.*, Charles E. Mueller, *Sources of Monopoly Power: A Phenomenon Called Product Differentiation*, 18 AM. U. L. REV. 1, 2 (1968) (describing how monopolisation *can be* accomplished through product differentiation, i.e. "the distinguishing of *substitute products* from one another (by advertising and the like) and thus the creation, *in the minds of buyers* of that product, of a conviction that it is superior to other products of the same general class, a conviction that permits it to command a supercompetitive price, one that exceeds the price being charged by other sellers for products that are in fact of comparable quality") (emphasis added).

[43] *See, e.g.*, Arthur, *supra* note 13, at 33–36 (arguing that product differentiation should be outside the scope of the sources of market power that antitrust should concern itself with); Hay, *supra* note 15, at 814–16.

[44] Hay, *supra* note 15, at 815 (using an example of a restaurant that has successfully differentiated itself from competitor restaurants through "endogenous product differentiation" and how, consequently, such "success does not signify the kind of market power the antitrust laws ought to be concerned about").

[45] Arthur, *supra* note 13, at 33–36 (1994).

[46] *See, e.g.*, Mueller, *supra* note 42, at 14–22 (describing the correlation between product differentiation and market concentration and concluding "the important cases of monopoly power, those in which the power to price above the competitive level is present in genuinely significant amounts, arise primarily out of a phenomenon called 'product differentiation'").

[47] *See generally* Lemley & McKenna, *supra* note 28 (showing that product differentiation can confer "significant" market power); P. Sean Morris, *Trademarks as Sources of Market Power: Drugs, Beers and Product Differentiation*, 35 J.L. & COM. 163 (2017).

3. Consumer information failures

Another demand-side imperfection contributing to scholarly anxiety about antitrust market power expanding too broadly is consumers' lack of omniscience. These kinds of market imperfections, scholars contend, are matters for contract law—not antitrust law—and thus should be outside the boundary of what might constitute antitrust market power.[48] Indeed, perhaps a vindication of these views was *Jefferson Parish*—where we saw the U.S. Supreme Court's reluctance to entertain such information failures for antitrust purposes.[49]

In sum, it can be gleaned that for the most part scholarly concerns about the concept of antitrust market power expanding too broadly have largely been a function of demand-side market failures. On some levels, this should not be too surprising, given the generally accepted adage that 'antitrust deals with the supply-side and consumer protection with the demand-side.'[50] To be sure, this is not a reason for *why* the law has bifurcated in this manner; it tells us only that the law is generally divided as such but nothing about why it *should* be this way. We will return to this issue below, where we will normatively analyse the consumer protection/antitrust boundary from the underexplored perspective of moral hazard.[51] For now, it is sufficient to note the separation.

That we have identified BE as a demand-side market failure, then, should provide us with at least some pause for thought to examine the issue of whether behavioral market failures—like other demand-side market

---

[48] *See, e.g.*, Klein, *supra* note 18, at 90 (citing Jefferson Par. Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 —a case about consumer information failures—and arguing "it is important to remember that the perfectly competitive model is merely an abstract economic construct, not a criterion for governmental intervention in the marketplace. In particular, it makes no sense to assume that *any* deviations from the unrealistic assumptions of the perfectly competitive model represent "imperfections" that should be eliminated as a way to increase competition and reduce market power"); Hovenkamp, *supra* note 30, at 306 (discussing franchisor-franchisee relationships and "[t]he wrong, if there is one, lies in the *franchisees' failure* to study contracts carefully before they enter into them, or perhaps in the franchisor's improper use of form franchise agreements that take advantage of less experienced business persons. But in that case any remedy should lie in *contract law*, not in the law of monopolies") (emphasis added).

[49] Jefferson Par. Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 27 (1984) (stating how consumer information failures "may generate 'market power' in some abstract sense, [but] they do not generate the kind of market power that justifies condemnation of tying").

[50] *See, e.g.*, Neil Averitt & Robert Lande, *Using the "Consumer Choice" Approach to Antitrust Law*, 74 ANTITRUST L. J. 175, 181 (distinguishing between antitrust's focus on the supply-side and consumer protection's focus on the demand-side); Samuel I. Becher & Oren Bar-Gill, *Consumer Protection* 49 (Harvard Law Sch. Pub. Law Working Paper No 18—42, 2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3194411&download=yes.("[I]n many consumer markets the assumptions of complete information and rationality do not hold. Market failures result in inefficiency and harm to consumers. In these conditions legal intervention may well be considered. This is the *domain of* consumer protection law") (emphasis added).

[51] *See infra* Section IV.a.

failures—potentially blur the line between consumer protection and antitrust. As Mark Patterson appropriately explains, "Coercion, deception, and other demand-increasing practices present difficult problems for antitrust law because their competitive harm, if any, appears not to be of the *same kind* as the harm caused by more traditional antitrust violations."[52] Two arguments can be made, therefore, in illuminating the need for a nuanced assessment about BE's capacity to justifiably trigger antitrust scrutiny. The first is a 'proxy' argument: that demand-side market failures (which BE falls into the category of) are usually the culprits in raising the issue of whether such market failures deserve to be antitrust problems. The second is an empirical argument: that in fact evidence demonstrates sometimes BE should raise antitrust issues and sometimes it should not considering the variance in evidence illustrating its potential capacity to significantly damage entire markets durably.

B. The proxy argument

Take for example the demand-side market failure of deception.[53] Deception on the one hand has been subjected to consumer protection legislation in the form of many US State Unfair and Deceptive Acts and Practices (UDAP) statutes[54] and unfair competition legislation.[55] However, rafts of variance exist as to *when* deception may constitute an antitrust issue.

---

[52] Mark R. Patterson, *Coercion, Deception, and Other Demand-Increasing Practices in Antitrust Law*, 66 ANTITRUST L.J. 1, 8-9 (1997) (emphasis added); *id.* at 32 (contending that even for sources of "demand-based market power" that are "regulated by expert agencies", antitrust "should only…defer after the *nature and extent* of the antitrust harm is determined") (emphasis added); *see also* Richard Craswell, T*ying Requirements in Competitive Markets: The Consumer Protection Issues*, 62 B.U. L. REV. 661 (1982) (arguing that tying arrangements not involving monopoly power should be removed from antitrust law entirely and moved under the auspices of consumer protection because of institutional competence issues).

[53] Patterson, *supra* note 52, at 3 (describing the effects of deception and coercion on antitrust as "demand effects"); Averitt & Lande, *supra* note 50, at 181 ("Consumer protection law…guards against other market failures by ensuring that *consumers are able to* make free and rational selection from among…options, unimpeded by artificial constraints, *such as deception*…") (emphasis added). Indeed, some US consumer protection legislation limits its application to deceptive practices that consumers *themselves* cannot overcome, which thus serves to illustrate it as a demand-side market failure. *See, e.g.*, 15 U.S.C. § 45(n) ("The Commission shall have no authority under this section…to declare unlawful an act or practice on the grounds that such act or practice is unfair unless the act or practice causes or is likely to cause substantial injury to consumers which is *not reasonably avoidable by consumers themselves*...") (emphasis added).

[54] *See, e.g.*, Consumer Protection Act of 1977, TENN. CODE ANN. § 47-18-104(b)(8) (prohibiting "disparaging the goods, services or business of another by false or misleading representations of fact"); REVISED UNIF. DECEPTIVE TRADE PRACTICES ACT § 2(a)(8) (1966) (describing how the Uniform Act is "designed to bring state law up to date by removing undue restrictions on the common law action for deceptive trade practices"); Florida Deceptive and Unfair Trade Practices Act, FLA. STAT. § 501.204 ("Unfair methods of competition, unconscionable acts or practices, and unfair or deceptive acts or practices in the conduct of any trade or commerce are hereby declared unlawful"); Deceptive Trade Practices Act, TEX. BUS & COM. CODE § 17.46(a) ("False, misleading, or deceptive acts or practices in the conduct of any trade or commerce are hereby declared unlawful and are subject to action by the consumer protection division under [certain sections] of this code").

[55] *See, e.g.*, 15 U.S.C. § 1125.

It is therefore one example of how the demand-side has the potential to blur the antitrust/consumer protection boundary.

Variance amongst U.S. federal appeals courts, for example, illustrates the potentially contingent nature about deception's capacity to durably damage the entire market significantly and thus justifiably trigger antitrust scrutiny.[56] In *Retractable Technologies v. Becton Dickinson*, for instance, the Fifth Circuit court doubted the capacity of false advertising to sustainably harm the market as a whole: it seemed to agree with the Seventh Circuit that it could be self-correcting (and hence not durable)[57] and, further, that it was unlikely to significantly affect competition in light of the dearth of demonstrative precedent.[58] And whilst other circuits have adopted a *de minimis* approach to false advertising,[59] we simultaneously have instances where courts have recognised deception's ability to damage significantly and durably the entire market.

Consider in these latter respects *United States v. Microsoft Corp.*,[60] exemplifying how "at critical junctures [deception] *can* substantially lessen competition."[61] Here the District Court found that Microsoft publicly represented that it would promote cross-platform technology such that independent software developers' applications could be used on both Windows operating system computers *and* rival operating system computers.[62] However, this in fact was not the case because Microsoft's tools covertly used "certain keywords and compiler directives", which rendered the applications Windows-specific and not usable on non-Windows

---

[56] *See* Michael A. Carrier & Rebecca Tushnet, *An Antitrust Framework for False Advertising*, 106 IOWA L. REV. 1841, 1850-54 (2021). *See also* Harvard Law Review Ass'n, Note, *Deception as an Antitrust Violation*, 125 HARV. L. REV. 1235, 1241–44 (2012) (surveying the *de minimis* arguments against deception as an antitrust violation).

[57] Retractable Techs., Inc. v. Becton Dickinson & Co., 842 F3d 883, 895 (5th Cir 2016) ('[F]alse advertising simply "set[s] the stage for competition in a different venue: the advertising market". In such a setting, a business that is maligned by a competitor's false advertising may counter with its own advertising to expose the dishonest competitor and turn the tables competitively against the malefactor' (citing Sanderson v. Culligan Int'l Co., 415 F3d 620, 623 (7th Cir 2005)).

[58] *Id.*, at 895 ("That false advertising alone hardly ever operates in practice to threaten competition…is confirmed…by a dearth of Fifth Circuit precedent…").

[59] Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc., 323 F.3d 366, 370 (6th Cir. 2003) ("An antitrust claim premised primarily on advertising or speech must overcome a presumption that such advertising or speech had a *de minimis* effect on competition"); Am. Pro. Testing Serv. v. Harcourt Brace Jovanovich Legal & Pro. Publ'ns, 108 F.3d 1147, 1152 (9th Cir. 1997) ("While false or misleading advertising directed solely at a single competitor may not be competition on the merits, the fliers in question must have a *significant and enduring* adverse impact *on competition itself* in the relevant markets to rise to the level of an antitrust violation") (emphasis added); Nat'l Ass'n of Pharm. Mfrs., Inc. v. Ayeserst Labs., 850 F.2d 904, 916 (2d Cir. 1988) ("[A] plaintiff asserting a monopolization claim based on misleading advertising must overcome a presumption that the effect on competition of such a practice was *de minimis*").

[60] United States v. Microsoft Corp, 253 F3d 34 (D.C. Cir. 2001) [hereinafter *Microsoft*].

[61] Maurice E. Stucke, *How Do (and Should) Competition Authorities Treat a Dominant Firm's Deception?*, 63 S.M.U. L. Rev. 1069, 1111 (2010) (emphasis added).

[62] *Microsoft*, 253 F.3d at 76.

operating systems.[63] Thus, "developers who relied upon Microsoft's public commitment to cooperate with Sun and who used Microsoft's tools to develop what Microsoft led them to believe were cross-platform applications ended up producing applications that would run only on the Windows operating system."[64]

Internal emails and documents demonstrated the deceptively exclusionary intent of Microsoft,[65] and the D.C. Circuit ultimately held that the conduct anticompetitively insulated Microsoft's monopoly position and, therefore, violated the Sherman Act.[66]

Note also deception's capacity to damage the market not just substantially but also durably—particularly in two-sided markets with network effects where even a single deceptive proclamation can tip demand.[67] In *Caldera I*, a rival operating system claimed Microsoft engaged in deceptive practices to eliminate it from the market.[68] Among these were "allegedly improper actions" of "preemptive false and misleading announcements of forthcoming, competitive [Microsoft] products"[69]—a practice known as "Vaporware." This had the effect of dissuading computer

---

[63] *Id.* ("As a result, even Java developers who were opting for portability over performance…unwittingly [wrote] Java applications that [ran] only on Windows.").

[64] *Id.*

[65] *Id.* at 76-77 ("[O]ther Microsoft documents confirm that Microsoft intended to deceive Java developers, and predicted that the effect of its actions would be to generate Windows-dependent Java applications that their developers believed would be cross-platform; these documents also indicate that Microsoft's ultimate objective was to thwart Java's threat to Microsoft's monopoly in the market for operating systems").

[66] *Id.* at 77 ("Microsoft's conduct related to its Java developer tools served to protect its monopoly of the operating system in a manner not attributable either to the superiority of the operating system or to the acumen of its makers, and therefore was anticompetitive. Unsurprisingly, Microsoft offers no procompetitive explanation for its campaign to deceive developers. Accordingly, we conclude this conduct is exclusionary, in violation of § 2 of the Sherman Act").

[67] David Dranove & Neil Gandal, *The DVD vs. DIVX Standard War: Empirical Evidence of Vaporware*, 20 (Univ. Cal. Berkeley, Competition Pol'y Ctr., Working Paper No. CPC00-16, 2000), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=502842 ("[T]he result that the product preannouncement by an entrant had such a large effect suggests that a product preannouncement by an incumbent would likely have a much larger effect; hence the *general antitrust concern* about vapourware seems justified") (emphasis added); *see also* Joseph Farrell & Garth Saloner, *Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation*, 76 AM. ECON. REV. 940, 942 (1986) (arguing that in the context of network effects industries, product preannouncements may have significant effects like "critically determin[ing] whether the new product supersedes the existing technology"); Mark A Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479, 504 (1998) ("By preannouncing a product, a large company may…influence the outcome of a standards competition in an industry characterised by network effects"). Note that Lemley and McGowan doubt the capacity of deceptive practices like vapourware to generate anticompetitive effects in non-network effect markets and cite consumer protection as the appropriate legal regime. Lemley & McGowan, *supra* note 67, at 504–505 ("Absent network effects…it is difficult to see why anyone would be concerned about vapourware as an antitrust issue. Repeated efforts to deceive customers might be punishable as fraud or deceptive advertising if the market does not discipline the company, but it is unlikely that deception could really lead to market power in a non-network market").

[68] Caldera, Inc. v. Microsoft Corp., 72 F. Supp. 2d 1295, 1299 (D. Utah 1999).

[69] *Id.*

manufacturers to switch from Windows to the rival's operating system.[70] The plaintiff claimed in 1994—several years after the alleged deception apparently began—that it would withdraw from the market.[71] At this point, Microsoft announced its new software would not be available until August 1995.[72] The district court saw some merit in a section 2 Sherman Act violation and denied Microsoft's motion for partial summary judgment.[73] Microsoft settled for an estimated $275 million.[74]

Kodak and *Jefferson Parish* further exemplify variance about demand-side market failures and their potential to blur the line between consumer protection and antitrust.[75] Each "relied upon a market failure that is more often associated with consumer protection violations . . . ."[76] *Kodak* and *Jefferson Parish* both implicated information failures – a market failure that has usually been housed under the auspices of consumer protection.[77] Perhaps this is why we saw such antagonistic responses to *Kodak* from various commentators, as highlighted above. Indeed, the opposite outcomes in these cases demonstrate the penumbral nature of such market failures. For instance, it has been contended that *Jefferson Parish* represented an express rejection of "the notion that the pricing discretion from … imperfect information can be antitrust market power."[78] And yet the outcome in *Kodak* suggested that imperfect information can generate antitrust market power.[79] However, it has been argued that *Kodak* should be limited to its specific set of facts and, therefore, its application to cases with "very similar facts"[80]—a further illustration of the potentially contingent nature of such demand-side

---

[70] *Id.* at 1300 (One Microsoft executive stated: "[v]irtually all of our OEMs were informed about DOS 5, which *diffused* DRI's ability to capitalize on a window of opportunity with these OEMs").

[71] *Id.* at 1304.

[72] *Id.* ("Caldera claims that shrouded in the fog of such vaporware and as a result of *years of* Microsoft's illegal anticompetitive conduct, Novell announced in September 1994 that it would withdraw from active development and marketing of further versions of DOS. On the heels of Novell's exit from the market, Microsoft announced on December 20, 1994, that Chicago, now officially termed "Windows 95," may not be available until August 1995") (emphasis added).

[73] *Id.* at 1249.

[74] *Microsoft Settles Unfair Competition Suit by Caldera*, 7 No. 7 Andrews Antitrust Litig. Rep. 7 (2000); *See also* Graham Lea, *Caldera vs Microsoft – The Settlement*, BBC NEWS (13 January 2000, 3:30 PM), http://news.bbc.co.uk/2/hi/business/600488.stm.

[75] Robert H. Lande, *Market Power Without a Large Market Share: The Role of Imperfect Information and Other 'Consumer Protection' Market Failures* 8 (Am. Antitrust Inst., Working Paper No. 07-06, 2007), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1103613.

[76] *Id.*

[77] Becher & Bar-Gill, *supra* note 50, at 49 ("[I]n many consumer markets the assumptions of complete information and rationality do not hold. Market failures result in inefficiency and harm to consumers. In these conditions legal intervention may well be considered. This is the *domain of* consumer protection law") (emphasis added).

[78] Arthur, *supra* note 13, at 41.

[79] Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 US 451, 486 (1992).

[80] Jacobs, *supra* note 41, at 369 ("An obvious way to limit the reach of *Kodak* is to restrict its applicability to cases with very similar facts").

market failures' capacities to generate either antitrust or consumer protection issues. Indeed, interpreting *Kodak* like this—limiting its application to complex durable goods markets—generates the conceptual problem for future courts of identifying the meaning of "complex,"[81] such that in some markets *Kodak* would trigger antitrust scrutiny and in some it would not.

C. The empirical argument

All of the foregoing is just a proxy for being put on notice about BE's capacity to justifiably trigger antitrust scrutiny. Practically and more pointedly, there is variance in BE's capacity to generate the kind of market power—that is, significant and enduring—that antitrust ought to concern itself with.

Research demonstrates, for example, the heterogeneous capacity for consumers to learn over time and move towards more perfect levels of rationality in their decisions and judgments.[82] Additionally, the heterogeneous distributions of *irrationality* across individuals and contexts[83] further exemplify BE's potential variance for generating antitrust market power. It thus highlights the need for a nuanced understanding in this respect. The significant and enduring nature of behavioral market failures, then, may vary and thus highlights the need for appreciating *when* such failures can justifiably be antitrust issues and *when* they cannot.

In sum, the above considerations would seem to be placing us in a landscape where behavioral market failures—like other demand-side market failures—may not always be antitrust issues. Whilst nefarious demand-increasing practices generally have often been cited as doctrinally outside antitrust's remit[84]—an unfortunately narrow, non-consequentialist

---

[81] *Id.*("[T]he next court encountering a similar dispute will have to fashion a workable, narrow definition of '*complex* durable goods'") (emphasis in original).

[82] *See, e.g.*, Ernst Fehr & Jean-Robert Tyran, *Individual Irrationality and Aggregate Outcomes*, 19 J. ECON. PERSP. 43, 43(2005) ("A second common argument [about markets' abilities to 'correct or offset individually anomalous behaviors'] is that even if individuals are irrational at times, they will learn from their mistakes. While market experience can diminish anomalous behavior in some cases…a number of powerful individual anomalies, like the failure to update expectations in a Bayesian manner, are very robust to individual learning in markets…"); Colin F. Camerer, *Do Biases in Probability Judgment Matter in Markets? Experimental Markets*, 77 AM. ECON. REV. 981 (1987); Colin F. Camerer, *The Rationality of Prices and Volume in Experimental Markets*, 51 ORG. BEHAV. AND HUM. DECISION PROCESSES 237, 267 (1992) ("The data suggest that individual errors are *sometimes* reduced, but not eliminated, in experimental markets under ideal learning conditions").

[83] *See* Peter O'Loughlin, *The Limits of Behavioral Antitrust*, 52 UNIV. OF BALT. L. REV. 201, 237–248 (2023).

[84] *See* Patterson, *supra* note 52, at 20–26; s*ee, e.g.*, Jefferson Par. Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 27 (1984) (stating how consumer information failures "may generate 'market power' in some abstract sense, [but] they do not generate the kind of market power that justifies condemnation of tying"). An illuminating example in this regard is *Schachar v. American Academy of Ophthalmology, Inc.* In this case, the plaintiff had developed a new ophthalmological procedure and alleged that the defendants—an ophthalmological trade association—had acted anti-competitively by publicly disparaging the procedure. Schachar v. Am. Acad. of Ophthalmology, 870 F.2d 397, 397-98 (7th Cir. 1989). However, in defining market power as the restriction of supply, Judge

perspective that fails to account for the real effects of such practices[85]—such a purely legal view omits the instances, as shown above, when antitrust enforcement may be warranted because there was in that specific context a significant and enduring impact on competition.[86] We now turn to examine the difficulty existing doctrine has encountered in assuming under its auspices the behavioural market failures in some of the ongoing enforcement actions. These difficulties thus illuminate the potential need for a new workable test for judges and regulators in resolving these emerging forms of foreclosure.

II. COGNITIVE FORECLOSURE MISIDENTIFIED

The *Google Search (Shopping)* judgment[87] exemplifies the difficulty of subsuming emerging and novel foreclosure methods under pre-existing areas of law[88]—thereby illustrating antitrust's doctrinal identification problem.[89] A doctrinal identification problem involves the apparent lack of existing substantive law to apply because of new phenomena that cannot be conceptually squared with existing rules.[90]

Note that this doctrinal issue of identification—that is, discerning

---

Easterbrook narrowed antitrust's application and hence held that the demand-side practices here could not trigger antitrust issues. *Id.* at 400 ("The Academy's declaration affected only the demand side of the market, and then only by appealing to consumers' (and third-party payors') better judgment. If such statements should be false or misleading or incomplete or just plain mistaken, the remedy is not antitrust litigation but more speech—the marketplace of ideas"); *id.* at 399 ("Unless one group of suppliers diminishes another's ability to peddle its wares (technically, reduces rivals' elasticity of supply), there is not even the beginning of an antitrust case…"); *id.* ("[Antitrust law] condemns reductions in output that drive up prices as consumers bid for the remaining supply") (citing NCAA v. Univ. of Okla., 468 US 85, 103–107 (1984)); Broadcast Music, Inc. v. CBS, Inc., 441 US 1, 19–20 (1979); Ind. Grocery, Inc. v. Super Valu Stores, Inc., 864 F2d 1409, 1413–1414 (7th Cir. 1989)).

[85] Note that the Court in *United States et al. v. Google LLC* has stipulated that accounting for 'market realities' rather than relying on formalistic legal distinctions is the approach to be taken. *See* Memorandum Opinion, *US et al v. Google LLC*, No. 1:20-cv-03010, at *34 (D.D.C. Oct. 6, 2023).

[86] *See id.*

[87] Case T-612/17, Google LLP v. Comm'n, ECLI:EU:T:2021:763 [hereinafter *Google Search (Shopping)*], under appeal Case C-48/22 *Google Shopping*.

[88] Justin Lindeboom, *Rules, Discretion, and Reasoning According to Law: A Dynamic-Positivist Perspective on Google Shopping*, 13 J. EUR. COMPETITION L. & PRAC. 63, 63 (2022).

[89] Case T-612/17, *Google Search (Shopping)*, 2021 ECLI:EU:T:2021:763, ¶ 158 ("Google [argues]…that the Commission does not identify anything in the practices at issue that deviates from competition on the merits"); *Id.* at ¶ 144 (Google argues that the Commission relied on "leveraging" but did not identify any 'anticompetitive feature' – in which case "the Commission would not have been entitled to classify [the] conduct as abusive").

[90] *See* Lindebloom, *supra* note 88, at 63 ("The *Google Shopping* case is legally challenging…because there was no pre-existing legal rule prohibiting self-favouring by dominant undertakings…"); Friso Bostoen, *The General Court's Google Shopping Judgment: Finetuning the Legal Qualifications and Tests for Platform Abuse*, 13 J. EUR. COMPETITION L. & PRAC. 75 (2022) (describing how *Google Search (Shopping)* is legally ambiguous and raises questions as to the legal qualification of the conduct involved); Renato Nazzini, *Google and the (Ever-Stretching) Boundaries of Article 102*, 6 J. EUR. COMPETITION L. & PRAC. 301, 313 (2015) (concluding that "the alleged Vertical Search Abuse does not fall squarely under any of the established categories or types of abuses"); *see also* Pablo Colomo, *Self-Preferencing: Yet Another Epithet in Need of Limiting Principles*, 43 WORLD COMPETITION 417 (2020).

how the conduct at issue fits within existing competition rules—is not simply a theoretical exercise and has significant practical implications. The initial legal characterisation of the conduct (e.g. refusal to deal, tying, margin squeeze) dictates the respective legal test to be applied. Yet some tests may be easier to satisfy than others, so the question of identification becomes wholly important, as the probability of liability varies according to different sets of legal criteria. Proving refusal-to-deal, for instance, is much more difficult than proving tying.[91]

Google Search (Shopping) has been described as "legally challenging … because there was [apparently] no pre-existing legal rule prohibiting self-favouring by dominant undertakings."[92] A case-specific rule was also absent, further exacerbating legal uncertainty.[93] Indeed, the fact-specific nature of the abuse of self-favouring would seem to be too concrete and insufficiently abstract to "offer a theory of broader use for leveraging conduct in digital markets."[94] Many commentators have, therefore, made efforts in the context of *Google Search (Shopping)* to square the case's facts with pre-existing substantive legal tests.[95] And indeed, issues of legal qualification seem to be at the fore of digital platform cases more generally, as most involve and are motivated by allegations of what has come to be known as "self preferencing."[96] Consider, for example, the cases against

---

[91] Bostoen, *supra* note 90, at 75 (describing how "legal qualifications can easily determine the outcome of a case").

[92] *See* Lindebloom, *supra* note 88, at 63.

[93] Magali Eben, *Fining Google: A Missed Opportunity for Legal Certainty?*, 14 EUR. COMPETITION J. 129, 141-50 (2018); *id.* at 143 (describing how the European Commission's "nebulous description [of Google's conduct] left much room for speculation as to the precise nature of the abuse").

[94] *See* Bostoen, *supra* note 90; Lindebloom, *supra* note 88 ("The decision-maker has to explain not only why this conduct is anticompetitive or abusive, but on the basis of what *general criteria* this and similar conduct are anticompetitive or abusive").

[95] *See, e.g.*, Bo Vesterdorf, *Theories of Self-Preferencing and Duty to Deal – Two Sides of the Same Coin*, 1 COMPETITION L. & POL'Y DEBATE 4 (2015); Marina Lao, *Search, Essential Facilities, and the Antitrust Duty to Deal* 11 NW. J. TECH. & INTELL. PROP. 275 (2013); Benjamin Edelman, *Does Google Leverage Market Power Through Tying and Bundling?*, 11 J. COMPETITION L. & ECON.; Ioannis Lianos & Eugenia Motchenkova, *Market Dominance and Search Quality in the Search Engine Market* 9 J. COMPETITION L. & ECON. 419 (2012); *see also* Bostoen, *supra* note 90, at 75.

[96] *See* Bostoen, *supra* note 90, at 75.; *see, e.g.*, Friso Bostoen & Daniel Mândrescu, *Assessing Abuse of Dominance and the Platform Economy: A Case Study of App Stores*, 16 EUR. COMPETITION J. 431, 435 (2020) (describing how platforms like the App Store and Google Play are vertically-integrated and "may thus be incentivized to preference the distribution of their own apps over those of competitors in various ways"); *cf.* Case T-612/17, Google LLP v. Comm'n, ECLI:EU:T:2021:763, ¶ 240 [hereinafter *Google Search (Shopping)*], under appeal Case C-48/22 *Google Shopping* (holding that the behaviour at issue constituted "positive acts of discrimination").

Amazon[97] and *Google Ads*,[98] both of which are motivated by self-preferencing concerns.

The enforcement landscape is beginning to demonstrate that in these kinds of cases, the primordial issue seems to be the *effects* of the conduct on consumer behaviour.[99] Indeed, cases like *Funda*[100] and *Streetmap*[101] all highlight that in self-preferencing contexts, the issue seems not to be about the *fact of* discrimination in a platform's favour but rather the effects of such conduct on consumer behaviour.[102]

In *Funda*,[103] for instance, a Dutch court was confronted with discriminatory treatment by an online platform. A trade association of real estate agents also owned the online platform, Funda.[104] Rival estate agents argued that they were being discriminated against—that is, their search rank was not as favourable as the search rank accorded to the trade association's agents.[105] Although the court held that Article 102(c) TFEU could apply because similar transactions were being treated dissimilarly, the discriminatory conduct did not result in a competitive disadvantage.[106] The appeals court held the same and reasoned that consumers, in the process of making such an important purchase like that of a house, will conduct their search process with diligence and persistence.[107] Hence, the likelihood of such conduct resulting in anticompetitive outcomes would be low.[108] Thus when dealing with self-preferencing and in contrast to *Google Search (Shopping)*, similar conduct may result in different outcomes in different contexts.

---

[97] European Commission Press Release IP/20/2077, Commission Sends Statement of Objections to Amazon for the use of Non-Public Independent Seller Data and Opens Second Investigation Into its E-Commerce Business Practices (November 10, 2020); European Commission Press Release IP/22/7777, Commission Accepts Commitments by Amazon Barring it From Using Marketplace Seller Data, and Ensuring Equal Access to Buy Box and Prime (December 20, 2022).

[98] European Commission Press Release IP/21/3143, Commission Opens Investigation Into Possible Anticompetitive Conduct by Google in the Online Advertising Technology Sector (June 22, 2021) ("The European Commission has opened a formal antitrust investigation to assess whether Google has violated EU competition rules by *favouring* its own online display advertising technology services in the so called 'ad tech' supply chain, to the detriment of competing providers of advertising technology services, advertisers and online publishers") (emphasis added); European Commission Press Release IP/23/3207, Commission Sends Statement of Objections to Google Over Abusive Practices in Online Advertising Technology (June 14, 2023).

[99] *See* Case C-13/528337, VBO Makelaar v. Funda, ECLI:NL:RBAMS:2018:1654; Streetmap.Eu Limited v. Google Inc., Google Ireland Limited, Google UK Limited [2016] EWHC (Ch) 253 [hereinafter *Streetmap.eu v. Google*].

[100] Case C/13/528337, VBO Makelaar v. Funda, NL:RBAMS:2018:1654.

[101] Streetmap.eu v. Google [2016] EWHC (Ch) 253.

[102] *See* Bostoen, *supra* note 90, at 80.

[103] Case C/13/528337, VBO Makelaar v. Funda, ECLI:NL:RBAMS:2018:1654.

[104] *Id.*

[105] *Id.*

[106] *Id.*

[107] *Id.*

[108] Case C/13/528337, VBO Makelaar v. Funda, ECLI:NL:GHAMS:2020:1337, ¶3.9.

In *Streetmap*,[109] an emphasis on demonstrating foreclosure effects from the demand-side was similarly evident. An online maps provider argued that Google engaged in self-preferencing by promoting and displaying in a preferential manner its own maps application.[110] After characterising the case as one of discrimination rather than tying by differentiating *Microsoft*,[111] the court held that the threshold question for liability was proof of foreclosure effects.[112] The court broadly conceived of "input foreclosure" here as access to consumers via promotional display.[113] However because only a limited number of users were diverted away from rival map providers due to the preferential display of Google's map application, the court concluded that no anti-competitive foreclosure had resulted.[114] Indeed, the court had reasoned that for liability to result, the foreclosure effect had to be serious and appreciable—[115]which is, perhaps, another way of saying it had to be "substantial".

These conceptual difficulties, as well as the substantial effects threshold, are not limited to self-preferencing contexts. In its ruling on motion for summary judgment, the court has made clear in *United States et al. v. Google LLC* that at the full trial the dispositive question will be based on "whether, as a matter of *actual market reality*, Google's position as the default search engine across multiple browsers is a form of exclusionary conduct."[116] And such exclusion must be substantial.[117] Note also the conceptual difficulty that seems to have motivated the U.S. DOJ's argument that Google's conduct is *de facto* exclusive: the qualification implies that *prima facie* Google's conduct is not squarely fitting into a typical exclusionary case, with the district court even acknowledging as much.[118] This is because none of the agreements at issue preclude the promotion or

---

[109] Streetmap.Eu Limited v. Google Inc., Google Ireland Limited, Google UK Limited [2016] EWHC (Ch) 253.

[110] *Id.* at ¶4 ("[T]he claimant contends that the defendants abused a dominant position in general search engines by the prominent and preferential display given to their own related online map product, thereby restricting competition from competing suppliers of online maps").

[111] *Id.* at ¶¶ 51–54.

[112] *Id.* at ¶ 62 ("A dominant firm is of course able, and indeed should be encouraged, to compete, and successful competition on its part is likely to harm and may ultimately exclude competitors. Accordingly, for there to be an abuse, what has to be established is that there is *anti-competitive* foreclosure") (emphasis in original).

[113] *Id.* at ¶ 63 ("But "input" is to be viewed broadly, and in the present case, the relevant input is the promotion afforded by display on the Google SERP; or put another way, display on the Google SERP is a form of access to customers").

[114] *Id.* at ¶ 139 ("Although this is not an easy assessment due to the limitations in the data, I find on consideration of all the evidence that the introduction of the new-style Maps OneBox in June 2007 did not in itself have an appreciable effect in taking custom away from Streetmap. In the light of that, I conclude that it was not reasonably likely to give rise to anti-competitive foreclosure").

[115] *Id.* at ¶ 96–97.

[116] Memorandum Opinion, United States v. Google LLC, No. 1:20-cv-03010, at *35 (D.D.C. Oct. 6, 2023).

[117] *Id.* at 31.

[118] *Id.*

integration of rival search engines, nor do they prevent end-users from switching to rival search engines.[119]

These cases on one view reveal that the legal threshold in such cases is a demand-side consideration.[120] So when commentators do debate the identification of the conduct at issue and encounter difficulties in subsuming (i.e. "identifying") it under pre-existing legal frameworks, is it any wonder, then, that regulators, courts, and commentators have found such a conceptual task difficult? On one view it should not be surprising, because attempts to date have for the most part relied upon supply-side doctrines—that is, trying to subsume a demand-side market failure under supply-side legal frameworks.

Take for example the inappropriateness of refusal to deal—a supply-side antitrust doctrine—in resolving self-preferencing.[121] Commentators have relied upon this doctrine to explain self-preferencing.[122] However, refusal-to-deal rules are wholly supply-side orientated. The conceptual dynamic usually involves one firm in possession of an indispensable input necessary to produce a good or service on a related market.[123] Refusing to supply such an indispensable input then results in foreclosure of a firm who requested the input, which has nothing to do with the demand-side market failure of consumers failing to exert their competitive constraints.[124] Thus, analogising *Google Search (Shopping)* makes little conceptual sense because the criteria are inapposite to deal with the demand-side market failure at issue. Indeed, that consumers are "inputs" was recognised in *Streetmaps*[125] and as discussed below, consumer en-masse switching is necessary for a platform's

---

[119] *Id.* at 34 ("The court finds that there is a genuine dispute of material fact as to whether Google's Browser Agreements are, at least, *de facto* exclusive. Google is, of course, correct that its Browser Agreements do not prevent users from switching the default search engine, and do not prohibit browser developers from promoting and entering into revenue-share agreements with other search engines"); *cf. id.* ("Critically, the competitive effects of holding default status, when combined with Google's scale advantage, is a hotly disputed issue in this case"); *id.* ("It is best to await a trial to determine whether, as a matter of actual market reality, Google's position as the default search engine across multiple browsers is a form of exclusionary conduct"); *cf.* John E. Lopatka & William H. Page, *The Microsoft Litigation's Lessons for United States v. Google*, 77 UNIV. MIA. L. REV. 319, 363–369 (2023) (using the *Microsoft* decision as doctrinal basis for analogising Google's contracts).

[120] *See* Bostoen, *supra* note 90, at 75 ("It should be clear from the *Streetmap* and *Funda* cases that, even under a discrimination standard, unequal treatment does not equate to abuse. The devil is often in the anticompetitiveness threshold of "competitive disadvantage", now generally interpreted as capability (or likelihood) of anticompetitive effects, for which not just any disadvantage suffices").

[121] *See* Pinar Akman, *The Theory of Abuse in Google Search: A Positive and Normative Assessment Under EU Competition Law*, 2017 U. Ill. J. OF L., TECH. & POL'Y 301, 307-27 (2017).

[122] *See, e.g.*, Lao, *supra* note 95, at 275; Vesterdorf, *supra* note 95, at 4; *cf.* Nicolas Petit, *Theories of Self-Preferencing Under Article 102 TFEU* (European Univ. Inst., Competition L. & Policy, Working Paper 2015), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2592253.

[123] *See* Vesterdorf, *supra* note 95, at 8.

[124] *Id.*

[125] Streetmap.Eu Limited v. Google Inc., Google Ireland Limited, Google UK Limited [2016] EWHC (Ch) 253.

new entry into the market at the *inter-platform* level of rivalry. But Google is not *in possession* of the consumers; rather, it has *control* over them.

Discrimination offers another illustration of the inappropriateness of squaring a demand-side market failure with supply-side doctrines.[126] Article 102(c) TFEU—the applicable legislative provision—requires that the discrimination take place between trading parties other than the dominant undertaking.[127] But the supply-side nature of this requirement fails to account for the fact that the foreclosure effect is manifesting not because of discrimination but because consumers themselves are acting less than rationally.

Even quasi-demand-side doctrines like tying fail to appropriately resolve self-preferencing issues.[128] Although tying does incorporate a demand-side component for determining liability—that is, the lack of consumer choice to obtain the tying product without also having to simultaneously obtain the tied product—this does not account for the fact that consumers are not being *forced* to click on anything in the context of *Google Search (Shopping)*.[129] Rather, the issue is that when a certain display structure is adopted—some options more visible and vivid and others less so—then users behave accordingly[130] because of some cognitive defect that departs from the strict axioms of perfect rationality. Some argue that this amounts to a *de facto* tie,[131] but this seems both far-reaching and undesirable from a policy perspective – for whenever consumers fail to exert their competitive constraints because of some kind of ostensibly benign conduct, the firm will be liable. Otherwise put, it places firms at the mercy of consumer decision-making and holds them in effect to an *ex-ante* standard of avoiding conduct that might reasonably result in consumers succumbing to irrational decision making.

Although each of the foregoing forms of abuse—refusal-to-deal, tying, discrimination—will require the foreclosure effect to be substantial, that is not what the issue is. The issue is the initial legal characterisation of the impugned conduct, not an evaluation of its likely effects. Indeed, as noted, such a task is crucial because issues of qualification dictate applicable legal tests, "which in turn hinges on the legal qualification given to such conduct."[132] However, in formulating a broader framework that captures conduct like that at issue in *Google Search (Shopping)* and others,[133] one

---

[126] Akman, *supra* note 121, at 327.
[127] *Id.* at 309.
[128] *Id.* at 346.
[129] *Id.* at 317.
[130] Edelman, *supra* note 95.
[131] *Id.* at 373-374.
[132] *See* Bostoen, *supra* note 90, at 85.
[133] *Id.*

should be mindful of the effects so that the abstract criteria identified has practicable and workable value for regulators and judges. Otherwise put, the criteria used for legal characterisation should arguably reflect the effects and vice versa, which would not only align with the effects-based approach now firmly governing antitrust enforcers' decision-making but could also be desirable from the perspective of legal certainty (firms *ex-ante* would at least now know that the legality of their conduct will hinge on demand-side effects). This is similar to what some have called "procedural methodology" in antitrust enforcement.[134] More than this, however, is the need for a framework to appropriately identify 'substantial' and 'sustainable' demand-side market failures. Cognitive foreclosure, as a demand-side market failure, falls into a category of market failures that, as discussed, are infamous in this respect. Consequently, the criteria should arguably be such as to try and limit intervention only to contexts in which such a substantial and durable demand-side market failure can arise. Additionally, it should arguably only be limited to behavioural phenomena that can significantly and durably influence consumer behaviour.

Indeed, not all markets have the same capacities for market failures.[135] Some are more conducive to anti-competitive conduct than others. The structure-conduct-performance paradigm, for instance, sought to highlight this fact by recognising the heterogeneity of market structures and how some structures could lead to more anti-competitive outcomes than others.[136] George Stigler also once noted that "collusion is impossible for many firms and collusion is much more effective in some circumstances than in others."[137] Additional examples of this nuance may be seen across international antitrust enforcement regimes, where regulatory guidance acknowledges (at least implicitly) that some market structures may contain more of the necessary and sufficient conditions for anti-competitive outcomes than others.[138] Oligopolies, for example, are probably more

---

[134] *See* Barak Orbach, *Antitrust Stare Decisis*, 15 THE ANTITRUST SOURCE 1, 7 (2015).

[135] *See* Leonard W. Weiss, *The Structure-Conduct-Performance Paradigm and Antitrust*, 127 UNIV. PA. L. REV. 1104 (1979).

[136] *See id.*

[137] George J Stigler, *A Theory of Oligopoly* 72 J. POL. ECON. 44, 44 (1970).

[138] *See, e.g.*, *Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union to Horizontal Co-operation Agreements*, 2023 O.J. (L 259/01) ¶ 80 ("In a complex market environment more information exchange is normally needed to reach a common understanding on the terms of coordination and to monitor deviations. For example, it is easier to achieve collusion on a price for a single, homogenous product, than on numerous prices in a market with many differentiated products"); *id.* at ¶ 78 ("Collusive outcomes are more likely in transparent markets [and] '[t]he pre-existing degree of transparency, inter alia, depends on the number of market participants and the nature of transactions…"); *id.* at ¶ 85 ("Overall, for a collusive outcome to be sustainable, the threat of a sufficiently credible and prompt retaliation must be likely. Collusive outcomes are not sustainable in markets in which the consequences of deviation are not sufficiently severe to convince coordinating companies that it is in their best interest to adhere to the terms of the collusive outcome. For example, in markets characterized by infrequent, lumpy orders, it may be difficult to establish a sufficiently severe deterrence

conducive to collusion "as it is easier for fewer companies to reach a common understanding on the terms of coordination and to monitor deviations."[139] Note that this nuance is not limited to collusive outcomes; more pertinent for our purposes is the demand-side of the market, which has been subjected to several nuanced antitrust policy proposals in the context of unilateral conduct that recognise variance in market structure and how some may justifiably trigger antitrust scrutiny more than others.[140]

A nuanced approach to antitrust enforcement policy has been the hallmark of various attempts to make antitrust enforcement workable. We have seen this with respect to different antitrust schools' beliefs in market disciplining effects and their concomitant preferences for antitrust enforcement scope.[141] Workable means an antitrust enforcement policy that acknowledges competition may in some instances survive some of the deviations from perfect competition and, hence, remain "fairly healthy and workable" despite those imperfections.[142] It is in these instances that "one may hope that government need not assume the burden of doing something"[143] and instead rely on the market to correct itself. More pointedly, it can be argued that nuance is a necessity for any antitrust enforcement policy because of (1) the impossibility of perfectly competitive markets[144]—a point once famously made by economists[145]—and (2) the by

---

mechanism, since the gain from deviating at the right time may be large, certain and immediate, whereas the losses from being punished small and uncertain, and only materialise after some time"); *see, e.g.*, Rekabet Kurumu, Turkish Competition Authority, *Guidelines on Horizontal Cooperation Agreements*, 13-24/326-RM (6) (2018), ¶¶ 60-66.

[139] 2023 O.J. (L 259/01), ¶ 79.

[140] Scholars more recently have exhibited nuance by relying on various factors to identify and make workable antitrust in the context of demand-increasing practices. For example, some rely on market structure and posit that in more concentrated industries a monopolist can maintain and solidify market power when it engages in deceptive practices like false advertising. *See, e.g.*, Carrier & Tushnet, *supra* note 56, at 1841. Others propose a "quick-look" standard that establishes a *prima facie* case for liability if it appears that the conduct is reasonably capable of contributing significantly to maintaining a monopolist's market power. *See, e.g.*, Stucke, *supra* note 61, at 1071. And yet others say liability should be triggered when it imposes costs on purchasers of other products, like in a tying case where output is reduced in a market 'related to the one in which demand is increased'. *See, e.g.*, Patterson, *supra* note 52. Others recognise that certain market structures may be *more* conducive to maintaining potentially anticompetitive demand-increasing practices than others. *See, e.g.,* Max Huffman, *Bridging the Divide? Theories for Integrating Competition Law and Consumer Protection*, 6 EUR. COMPETITION J. 7, 19 (2010). ("False reporting of prices will be successful only if not counteracted by competitors. A producer with *de minimis* market power will have no ability to influence competitive entry decisions through price reporting. By contrast, producers in an oligopoly marketplace may tacitly collude in false price reporting, and a monopoly producer will be able to control price reports through its unilateral conduct").

[141] *See* O'Loughlin, *supra n*ote 7, at 1103, footnote 16.

[142] J. M. Clark, *Toward a Concept of Workable Competition,* 30 AM. ECON. REV., 241, 256 (1940).

[143] *Id.*

[144] Steve Isser, *What Is Workable Competition, Anyway (and Why Should We Care?)* 1 (Working Paper, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2880147 ("The necessity of some form of a model of workable competition is the impossibility of a perfectly competitive market").

[145] *See* Sanford J. Grossman & Joseph E. Stiglitz, *On the Impossibility of Informationally Efficient Markets*, 70 AM. ECON. REV. 393 (1980).

now obvious fact that not all deviations from perfect competition are sufficiently indented to warrant antitrust scrutiny.

In our efforts to make Behavioural Antitrust workable, then, and identify substantial and sustainable anti-competitive behavioural harms, we must acknowledge the reality that is the nuance of market characteristics and behavioural phenomena and how some industries may be more poised than others to cognitively foreclose competition significantly and durably.[146] This is what has been referred to as "boundary conditions."[147]

III. COGNITIVE FORECLOSURE AS ANTITRUST HARM IDENTIFIED – TOWARDS 'WORKABLE' COGNITIVE FORECLOSURE

A. Is the firm willing and able to control consumers ubiquitously and continuously in the relevant market identified?

The first necessary condition for a substantial and durable behavioural market failure to occur is that the market must be one in which the manipulator has continuous and ubiquitous control over almost all relevant consumers and their interaction with the product or service. If this were not the case, consumers and their demand functions could not be manipulated in the first instance.

This point perhaps becomes more significant to note when one considers the importance of switching to the rivalrous process in digital platform markets at the inter-platform level of rivalry. Data begets digital platform success, incentivizing firms to multitudinously attract and retain users. Firms therefore possess strong incentives to frustrate switching and/or multi-homing and induce single homing. Further, the fact that platform competition is for the market only compounds these incentives because a platform's value to any given user and advertiser increases as *total* users increase (direct and indirect network effects). Thus, the fact that users will migrate to (and stay on) a platform with the majority of users demonstrates why in these kinds of markets there will ever only be a "place for [just] a limited number of platforms."[148] Both these reasons—data and the user scale/platform-value relationship—make platforms intensely motivated to capture and ensnare users on their platform.

---

[146] *See* Cass Sunstein, *The Storrs Lectures: Behavioral Economics and Paternalism*, 122 Yale L. J. 1826, 1831–1832 (2013) (stating how in some instances the market may be an effective remedy against behavioural exploitation while in other "identifiable cases, those who do *not* exploit human errors will be seriously punished by market forces, simply because their competitors are doing so and profiting as a result").

[147] *See* O'Loughlin, *supra* note 83, at 237-41.

[148] JACQUES CRÉMER, YVES-ALEXANDRE DE MONTJOYE & HEIKE SCHWEITZER, EUROPEAN COMMISSION, COMPETITION POLICY FOR THE DIGITAL ERA 1, 55 (2019).

A digital platform is therefore both incentivized and able to control aggregate demand because in these platform markets direct and indirect network effects dictate that the platform with the majority of users is where most of the market demand will be concentrated.

B. Are consumers likely to self-correct their cognitive shortcomings in the relevant market identified?

The second necessary condition for a substantial and sustainable behavioural market failure to occur is that the environment must be one in which consumers in the aggregate may not be expected to move towards greater levels of rationality. Otherwise put, it would have to be one in which the prediction of market self-correction is unlikely. In light of what we know of digital platforms' powerful capacities to control the rivalrous process,[149] self-correcting prospects on this view seem low. Indeed, whilst the Chicago–Post-Chicago debate manifested primarily in brick-and-mortar markets, digital platform markets are replicating this story because much of regulatory and policymaker anxiety is stemming from a doubt about the capacity for self-correction[150]—that Adam Smith's invisible hand is insufficient and needs supplementing with regulatory intervention.[151] Others are more optimistic about digital markets' self-correcting capacities.[152]

Advocates of "uniquely interventionist"[153] antitrust enforcement in digital platform markets argue market power is durable due to these markets' idiosyncrasies[154]—skeptical of their capacity to self-correct,[155] which exacerbates their foreclosure concerns.[156] In contrast, those arguing that concerns are overstated rely on history to inform their beliefs of markets' self-correcting capacities—that anxieties about insurmountable monopolies in the past have usually been misplaced.[157] These historical examples are met

---

[149] *Id.*

[150] FIONA SCOTT MORTON ET AL., STIGLER COMM. ON DIGIT. PLATFORMS, SUBCOMM. ON MKT. STRUCTURE & ANTITRUST, FINAL REP. 81 (2019).

[151] *See* CRÉMER ET AL., *supra* note 148, at 14. ("This competition policy must be vigorous, disciplined, and coherent. It must rely on solid analysis of the new market settings and of the market failures which *will imply* that "the invisible hand of the market" must be supplemented by the "visible hand" of competition authorities or of the legislator") (emphasis added).

[152] *See, e.g.*, Robert Bork & Gregory Sidak, *What Does the Chicago School Teach About Internet Search and the Antitrust Treatment of Google*, 8 J. COMPETITION L. & ECON. 663 (2012).

[153] John M. Newman, *Antitrust in Digital Markets*, 72 VAND. L. REV. 1497, 1497 (2019).

[154] *Id.* at 1503-1520.

[155] *Id.* at 1512-1517.

[156] *Id.* at 1518-1520; *see also* MORTON ET AL., *supra* note 150, at 41.

[157] Ryan Bourne, *Is This Time Different?*, 872 CATO INSTIT. POL'Y ANALYSIS 1 (2019); David Evans & Richard Schmalensee, *Debunking the Network Effects Bogeyman,* REGUL. 36 (2017); Bork & Sidak, *supra* note 152 (describing how Google overtook Yahoo); David Evans & Richard Schmalensee, *Some Economic Aspects of Antitrust Analysis in Dynamically Competitive Industries* 47 (Nat'l Bureau of Econ. Research, Working Paper No.

with a sur-reply—that "this time is different."[158]

Scope economies are one reason cutting against regulators' and policymakers' beliefs in the capacity for new entry in digital markets and therefore exacerbate their self-correction skepticism. For example, a platform offering email can combine its mapping technology to offer "a higher quality restaurant recommendation product."[159] These scope economies are touted as a critical reason why the "same small number of large digital companies" have been able to construct ecosystems "across several adjacent markets."[160] Amazon is a case in point[161] and illustrates rival foreclosure as a concern when the platform is *both* the marketplace regulator and a ubiquitous participant in that marketplace.[162] Amazon competes in online book retail, delivery and logistics, payment services, auction houses, television and film production and distribution, hardware manufacturing and lists an additional plethora of current and potential[163] competitors.[164] Thus, Amazon's competitors are also its customers due to its integration in multiple, related business lines. Its retail rivals may depend upon it for delivery, or media companies producing content may also depend on it for distribution. As Lina Khan concludes, "this arrangement creates conflicts of interest, given that Amazon is positioned to favour its own products over those of its competitors."[165]

Big Data is another reason for why 'this time may be different' and therefore engender disbeliefs in market self-correction. Data—dubbed the "new oil"[166]—may exacerbate the economies of scale and scope concerns due to datasets displaying "increasing marginal returns."[167] This means acquiring new data has rising benefits because it is advantageous to have more and more granular consumer information – allowing a platform firm to become "more and more confident about what the consumer wants, and to better tailor

---

8268, 2001) (highlighting the vulnerability of leading [digital] firms to entry powered by drastic innovation).

[158] Bourne, *supra* note 157 ("The past century is replete with warnings of "this time is different". Fears of entrenched monopoly power echo through time, often using near-identical arguments to those used against…tech giants today").

[159] MORTON ET AL., *supra* note 150, at 37; JASON FURMAN, UNLOCKING DIGITAL COMPETITION: REPORT OF THE DIGITAL COMPETITION EXPERT PANEL 32 (2019) ("There are…features of digital markets that mean costs can be reduced, or service quality increased, by operating simultaneously across multiple adjacent markets").

[160] Furman, *supra* note 159.

[161] Linda Khan, *Amazon's Antitrust Paradox*, 126 YALE L. J. 710 (2016).

[162] CRÉMER ET AL., *supra* note 148, at 60.

[163] Amazon, 2018 Annual Report 4 (2019), https://ir.aboutamazon.com/files/doc_financials/annual/2018-Annual-Report.pdf.

[164] Khan, *supra* note 161, at 754.

[165] *Id.*

[166] *The World's Most Valuable Resource is no Longer Oil, But Data,* ECONOMIST, (Jan. 17, 2020), https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data.

[167] MORTON ET AL., *supra* note 150.

its services and ads."[168] Google's acquisition of Nest Labs—an interactive thermostat manufacturer—is illustrative.[169] The thermostats use sensors that link to a user's day schedule, which may empower Google to develop a "*fuller* picture of users' conduct" and amplify its algorithmic power.[170] Data thus compounds scale and scope worries because a single digital firm with a diverse range of services will gain access to "detailed non-shopping information" about consumers[171]— "simultaneously generat[ing] and captur[ing] digital trails of personal and professional activities" which were "previously conducted in private and left little or no trace."[172] Ads become more targeted and services more granularly tailored.[173] Advertising on this particular platform consequently becomes more valuable as consumers more and more organise their social, cultural, and economic lives on one eco-system with "multiple [data] touch points."[174]

As such, companies possess no incentive to "stop looking for and accumulating new pieces of data, *entrenching* incumbents with large datasets vis-à-vis entrants with *smaller* databases."[175] Indeed, the European Commission has sent a Statement of Objections to Meta due to its potential to foreclose rival advertisers based partly on superior possession of data.[176]

---

[168] MORTON ET AL., *supra* note 150, at 48.; Daniel Rubinfield & Michal Gal, *Access Barries to Big Data,* 59 ARIZ. L. REV. 339, 342 (2017) ("Those who enjoy more portholes from which to gather data, who have a substantial database to which they can compare new data, or who possess unique data synthesis and analysis tools, may enjoy a competitive comparative advantage").

[169] *See* Bernard Marr, *Google's Nest and the Internet of Things in the Connected Home,* FORBES (Apr. 29, 2020), https://www.forbes.com/sites/bernardmarr/2015/08/05/googles-nest-big-data-and-the-internet-of-things-in-the-connected-home/#e4842bd3bac4.

[170] Rubinfeld & Gal, *supra* note 168, at 352 (emphasis added); *see also* Marr, supra note 169 (describing the acquisition as a first step by Google to enter the impending market for "smart homes").

[171] MORTON ET AL., *supra* note 150, at 45; *see also* Alessandro Acquisti *et al*., *The Economics of Privacy,* 54 J. ECON. LIT. 442, 444 (2016).

[172] Acquisti, *supra* note 171.

[173] MORTON ET AL., *supra* note 150, at 45.

[174] MORTON ET AL., *supra* note 150, at 48; *see* AUSTL. COMPETITION & CONSUMER COMM'N, DIGITAL PLATFORMS INQUIRY, FINAL REPORT 11 (2019), https://www.accc.gov.au/system/files/Digital%20platforms%20inquiry%20-%20final%20report%20-executive%20summary.pdf ("The multiple touch points that Google and Facebook each have with their users enable them to collect more user data, improve their services and attract more users and advertisers, creating a virtuous feedback loop").

[175] MORTON ET AL., *supra* note 150, at 48 (emphasis added); *see* AUSTL. COMPETITION & CONSUMER COMM'N, *supra* note 174 ("The breadth and depth of user data collected by the incumbent digital platforms provides them with a strong competitive advantage, creating *barriers to rivals* entering and expanding in relevant markets, and allowing the incumbent digital platforms to expand into adjacent markets") (emphasis added).

[176] European Commission Press Release IP/22/7728, Commission Sends Statement of Objections to Meta Over Abusive Practices Benefitting Facebook Marketplace, (December 19, 2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7728; *see also* Foo Yun Chee, *EU Antitrust Regulators Raise More Questions About Facebook's Online Marketplace*, REUTERS (April 7, 2020), https://www.reuters.com/article/us-eu-facebook-antitrust/eu-antitrust-regulators-raise-more-questions-about-facebooks-online-marketplace-idUSKBN21P22J.

C. Bias implication potential

The third necessary condition for a substantial and sustainable behavioral market failure is that the conduct at issue must have the capacity to implicate an identifiable behavioural bias. Relatedly, the bias implicated must be capable of significantly and lastingly influencing consumer behaviour, such that consumers themselves are unlikely to circumvent their cognitive shortcomings and obviate the need for antitrust. In short, the conduct must (1) be able to implicate an identifiable behavioural bias and (2) that bias must be capable of significantly and lastingly influencing consumer substitution. Illustrative in this respect is the heterogeneous distribution of irrationality and, in particular, those biases that would seem to persist even at higher levels of cognition.[177]

D. Consumers are "inputs"

The fourth and final condition necessary for a substantial and durable behavioural market failure to occur is that consumers themselves must be inputs. This condition seems necessary because only in markets where consumers are inputs and demand therefore constitutes a central force would behavioral market failures in the form of cognitive foreclosure seem to be able to affect aggregate demand. Indeed, as already noted, platform industries have been cited as more poised to fall foul to demand-side market failures and generate antitrust issues compared to ordinary markets.[178]

---

[177] Behavioral biases are partly a function of cognitive processing capacity, such that it has been shown that irrationality can reduce as cognition increases. Education levels have been a factor, amongst others, in this regard. *See* O'Loughlin, *supra* note 84, at 241-44; However, some biases have been shown to occur even in educated individuals. *See, e.g.*, John C Anderson et al., *Evaluation and Auditor Decisions: Hindsight Bias and the Expectation Gap*, 14 J. ECON. PSYCH. 711, 725 (1993) (highlighting how auditors may be subject to the hindsight bias); Hal R. Arkes et al., *Eliminating the Hindsight Bias*, 7 J. APPLIED PSYCH. 305, 306 (1988) (highlighting how psychologists may be subject to the hindsight bias); Hal R. Arkes et al., *Hindsight Bias Among Physicians Weighing the Likelihood of Diagnoses*, 66 J. F APPLIED PSYCH. 252, 253 (1981) (illustrating how "physicians exhibited the hindsight bias"); Loren J. Chapman & Jean P. Chapman, *Illusory Correlation as an Obstacle to the Use of Valid Psychodiagnostic Signs*, 74 J. ABNORMAL PSYCH. 271 (1969) (illustrating psychotherapists' use of heuristics which lead to erroneous decisions); Jeffrey J Rachlinski & Andrew J Wistrich, *Judging the Judiciary by the Numbers: Empirical Research on Judges*, 13 ANN. REV. L. & SOC. SCI. 203, 214 (2017) ("Overall, the evidence strongly indicates that judges will, in some cases, rely on simple intuitive strategies. The data on judges and the CRT show them to be intuitive thinkers on the whole").

[178] David Dranove & Neil Gandal, *The DVD vs. DIVX Standard War: Empirical Evidence of Vaporware* 20 (Univ. Cal. Berkeley, Competition Pol'y Ctr., Working Paper No. CPC00-16, 2000) ("[T]he result that the product preannouncement by an entrant had such a large effect suggests that a product preannouncement by an incumbent would likely have a much larger effect; hence the *general antitrust concern* about vapourware seems justified") (emphasis added); *see also* Farrell & Saloner, *supra* note 67, at 942 (arguing that in the context of network effects industries, product preannouncements may have significant effects like "critically determin[ing] whether the new product supersedes the existing technology"); Lemley & McGowan, *supra* note 67, at 504 ("By preannouncing a product, a large company may…influence the outcome of a standards competition in an industry characterised by network effects"). Note that Lemley and McGowan doubt the capacity of deceptive practices like vapourware to

Consider the importance of online users in digital platform contexts to the rivalrous process, particularly at inter-platform levels, discussed above.[179] Digital platforms usually incur large fixed costs but low marginal costs—that is, "the cost of [serving] an additional user on the platform is relatively low."[180] These "increasing returns to scale"[181] are said to be a barrier to entry because new firms are unable to match the incumbent's quality absent a large-scale operation to pay for the initial fixed cost, but large-scale can only be reached if quality is high.[182] Social networks are illustrative.[183] An increase in users "tends to raise the value of the platform to a given user."[184] If family and friends are on a social network, its value increases for any given user[185] because the determinative criteria for selecting a social network are its size and the availability of people a user actually wants to be in contact with (i.e. identity-based network effects).[186] New entrants—who initially have no users and therefore zero value to any given user—may find it difficult to compete. This latter phenomenon is known as "direct network effects," and their capacity to foreclose new entry[187] can be seen in the relationship between a platform's scale and value—meaning as its size grows its value grows, creating a positive feedback loop. Once a tipping point of numbers is reached, a platform may be a consumer's most attractive option. Thus, "[c]ompetitors with smaller networks may find it difficult to grow or even to protect their existing customer base from migration to the largest and most attractive network."[188]

---

generate anticompetitive effects in non-network effect markets and cite consumer protection as the appropriate legal regime. Lemley & McGowan, *supra* note 67, at 504–505 ("Absent network effects…it is difficult to see why anyone would be concerned about vapourware as an antitrust issue. Repeated efforts to deceive customers might be punishable as fraud or deceptive advertising if the market does not discipline the company, but it is unlikely that deception could really lead to market power in a non-network market").

[179] *See supra* Part III.

[180] AUSTL. COMPETITION & CONSUMER COMM'N, *supra* note 174, at 73.

[181] MORTON ET AL., *supra* note 150, at 37.

[182] *Id.*

[183] Search engines are also illustrative. *See* Bork & Sidak, *supra* note 152, at 687-688.

[184] AUSTL. COMPETITION & CONSUMER COMM'N, *supra* note 174, at 79.

[185] *Id.*

[186] BUNDESKARTELLAMT, BACKGROUND INFORMATION ON THE FACEBOOK PROCEEDING 3 (December 19,2017) 3; MAURICE STUCKE & ALLEN GRUNES, BIG DATA AND COMPETITION POLICY 164 (2016) ("[I]f your family and friends use WhatsApp to text, you will more likely use WhatsApp as well").

[187] Joseph Farrell & Paul Klemperer, *Coordination and Lock-in: Competition With Switching Costs and Network Effects,* HANDBOOK OF INDUSTRIAL ORGANISATION 2007 (2007) (Describing how network effects exist when 'one agent's "adoption of a good (a) benefits other adopters of the good" and "(b) increase others' incentives to adopt it"); *id.* at 2022 ("[T]he fact that adoption *encourages* others to adopt the same network" means "[a] user's adoption of A instead of B not only directly makes A more attractive to others but also makes the alternative, B, *less so*") (emphasis added).

[188] ELEONORA OCELLO, CRISTINA SJÖDIN, & ANATOLY SUBOČS, EUROPEAN COMMISSION, COMPETITION MERGER BRIEF, WHAT'S UP WITH MERGER CONTROL IN THE DIGITAL SECTOR? LESSONS FROM THE FACEBOOK/WHATSAPP EU MERGER CASE 1, 4, (2015). Eleonora Ocello, Cristina Sjödin, & Anatoly Subočs, *Competition Merger Brief, What's Up With Merger Control in the Digital Sector? Lessons From the Facebook/Whatsapp EU Merger Case* 1, 4 (2015).

IV. JUSTIFYING COGNITIVE FORECLOSURE'S LIMITS

A. Moral hazard

We now turn to examine why it is that antitrust should be limited only to those BE phenomena and markets with the potential for significantly and durably damaging entire markets. Otherwise put, BE phenomena and markets with only the potential for *de minimis* effects on competition should be excluded because they can best be regarded as "non-structural deviations from perfect competition"[189] and are perhaps better remedied by consumer protection. This limitation has been justified, for example, from the perspective of false positive costs and the concomitant chilling potential on business behavior.[190] The following analysis consequently departs from the usual supply-side analytical fulcrum relied upon for limiting antitrust enforcement's scope and instead relies upon the demand-side concern of consumer moral hazard.

Sometimes moral hazard has a role to play in regulatory policy. In financial crisis contexts, for example, regulators have sought to limit the use of state aid to failing banks because of moral hazard concerns.[191] Empirical research also suggests that the provision of too wide a safety net for financial firms may be more than just a theoretical concern.[192] The provision of insurance more generally has also been subjected to moral hazard concerns.[193] Even law schools are apparently no strangers to morally hazardous behaviour.[194] Some have even questioned the justifiability of humanitarian interventions in developing countries because the expectation of foreign state protection may increase risky (and even fraudulent) rebellion efforts.[195]

---

[189] Arthur, *supra* note 13, at 43.

[190] *Id.* at 62 ("By expanding the scope of antitrust market power to include at least some forms of nonstructural market power, *Kodak* necessarily increases the severity of antitrust regulation").

[191] 2013 O.J. (C 216) 1, ¶ 40 (highlighting how "[s]tate support can create moral hazard and undermine market discipline" and, as such, "[to] reduce moral hazard, aid should only be granted on terms which involve adequate burden-sharing by existing investors").

[192] Jong-Wha Lee & Kwanho Shin, *IMF Bailouts and Moral Hazard*, (Working Paper, 2005), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=640388 (finding "evidence that investor moral hazard is intensified on the countries that are more likely to be bailed out by the IMF"); *cf.* Steven L Schwarz, *Too Big to Fool: Moral Hazard, Bailouts, and Corporate Responsibility*, 102 MINN. L. REV. 761, 765–769 (2017) (criticizing the literature for a lack of evidence showing a link between bailouts and morally hazardous behavior).

[193] *See, e.g.*, Aviva Aron-Dine et al., *Moral Hazard in Health Insurance: Do Dynamic Incentives Matter?*, 97 REV. ECON. &STATISTICS 725 (2015); J. David Cummins & Sharon Tennyson, *Moral Hazard in Insurance Claiming: Evidence from Automobile Insurance*, 12 J. RISK & UNCERTAINTY 29 (1996).

[194] *See, e.g.*, Steven J. Harper, *Bankruptcy and Bad Behavior the Real Moral Hazard: Law Schools Exploiting Market Dysfunction*, 23 AM. BANKR. INST. L. REV. 347 (2015).

[195] *See, e.g.*, Ala J. Kuperman, *The Moral Hazard of Humanitarian Intervention: Lessons from the Balkans*, 52

Illustrating that too much protection for individuals may not always be socially desirable are several illuminating scenarios from the Balkans. For example, when Bosnia seceded from Yugoslavia in 1992, moral hazard has been proffered as an explanation for why the Muslim community chose rebellion rather than political discourse as an action: they apparently "believed they could prevail over the Serbs at a tolerable cost only because they expected to attract humanitarian intervention from the international community."[196] Similarly, in Kosovo, the reason behind why Albanian rebels chose violence has been attributed to moral hazard[197] rather than to reasons like failing to "expect massive retaliation,"[198] an erroneous belief that genocidal violence was going to happen regardless of militant action,[199] or an erroneous belief that the Serbs could be defeated "at a tolerable cost without [foreign] state intervention."[200] It has been argued that the social cost of this humanitarian intervention is "genocidal violence that otherwise would not have occurred."[201]

What social costs might be implicated by a legal regime that over-protects individuals from their own irrational behaviour? One cost that scholars and policymakers have consistently highlighted is the potential underdevelopment of more rational, more effective decision-making.[202] As Armstrong notes, "the general point is that excessive consumer protection may be inimical to the development of market skills in consumers."[203] Some formal economic models have illustrated this issue–that too much protection may dilute incentives to become more informed and, paradoxically, may actually end up harming consumers.[204] For example, Armstrong et al. find

---

INT'L. STUD. Q. 49 (2008).

[196] *Id.* at 60.

[197] *Id.* at 69 ("[T]he rebels launched their rebellion based on a belief that they could attract humanitarian intervention sufficient to attain their goal of Kosovo's independence at a tolerable cost in retaliation…").

[198] *Id.* at 67.

[199] *Id.* at 67-68.

[200] *Id.* at 68 ("The Albanians' early unsuccessful attempts to acquire military capability reveal that their initial pacifist strategy was born not of principle but rational calculation").

[201] *Id.* at 75.

[202] Christopher Decker, *Concepts of the Consumer in Competition, Regulatory, and Consumer Protection Policies*, 13 J. COMPETITION L. & ECON.151, 182 (2017) ("There can be a potential 'moral hazard' problem associated with introducing policies to protect non-standard consumers. In essence, if consumers are over-protected by policies, they may not invest effort to ensure that they acquire the skills to make effective decisions in other contexts"); Mark Armstrong, *Interactions Between Competition and Consumer Policy* 43-44 (Munich Pers. RePEc Archive, Working Paper No. 7258, 2008), https://econpapers.repec.org/paper/pramprapa/7258.htm ("[I]f consumers are overly protected in their market transactions, there is a danger of moral hazard and consumers may not develop the market skills to defend themselves against future exploitative conduct"); Mark Armstrong, *Economic Models of Consumer Protection Policies* 3-4 (Munich Pers. RePEc Archive, Working Paper No. 34773, 2011), https://mpra.ub.uni-muenchen.de/34773/1/MPRA_paper_34773.pdfa;. *see also* GERD GIGERENZER, RISK SAVVY: HOW TO MAKE GOOD DECISIONS (2015).

[203] Armstrong, *Economic Models*, *supra* note 202, at 4.

[204] *See, e.g., id.*

that the imposition of a price cap (a highly interventionist policy) led to a decrease in the number of informed consumers.[205] The result was a "weakening of competitive pressure," which allowed firms to raise prices.[206] More specifically, "price controls soften competition by *blunting consumers' incentives* to search for good deals. Although the direct effect of a price cap is to reduce prices, the indirect effect of reduced search lessens each firm's demand elasticity so much that prices on average go up."[207] Other models and studies found similar results–that a highly interventionist policy like a price cap can soften competition by reducing consumer engagement and, consequently, serve to indirectly raise prices because of increases in market power.[208]

Theoretical models also showcase how a rational regulated group of individuals may act calculatedly and choose to invest less effort in socially desirable behaviour when braced with both *ex-ante* and *ex-post* paternalistic legal regimes.[209] In an *ex-post* paternalistic scenario, for example, Klick and Mitchell find that "paternalistic protection not only generates a moral hazard in which an individual underinvests in cognitive effort during the current period, but it also reduces an individual's cognitive abilities in future periods relative to the situation in which no protection is provided."[210] This results in what the authors term a "cognitive hazard" because insuring individuals "against the costs of cognitive mistakes currently" raises the expectation of insurance in the future, thereby reducing cognitive investments overall.[211]

On these foregoing points, then, the following sections demonstrate how on several levels antitrust can be a much bigger stick than consumer protection and, hence, an enforcement regime with a wider insurance net protecting against cognitive mistakes. We can see this on the level of enforcement scope and penalties. Consequently, the analysis provides a foundation for limiting antitrust intervention for behavioural market failures only to biases and markets that can significantly harm market structure durably.

---

[205] Mark Armstrong et al., *Consumer Protection and the Incentive to Become Informed* 7 J. EUR. ECON. ASS'N 399, 410 (2009).

[206] *Id.*

[207] *Id.* at 407; *see* Kenneth Burdett & Kenneth L. Judd, *Equilibrium Price Dispersion* 51 ECONOMETRIC SOC'Y 955 (1983).

[208] *See, e.g.*, Chaim Fershtman & Arthur Fishman, *The 'Perverse' Effects of Wage and Price Controls in Search Markets* 38 EUR. ECON. REV. 1099, 1100 (1994) (Finding that "the effect of a price ceiling might be to lower the expected benefit from additional search, reduce the equilibrium amount of search activity and thus endow firms with increased market power").

[209] Jonathan Klick & Gregory Mitchell, *Government Regulation of Irrationality: Moral and Cognitive Hazards*, 90 MINN. L. REV. 1620, 1642-1649 (2006).

[210] *Id.* at 1649.

[211] *Id.*

B. Broader enforcement regime

Consider the fact that in some legal regimes, antitrust's enforcement scope may be broader than consumer protection. In the U.S., for instance, "unlike the federal Lanham Act, which denies consumers standing to sue despite the direct harm they suffer from false advertising, antitrust law…allows customers to challenge the harms they experience from false advertising."[212] Additionally, some state consumer protection laws may be limited in their potential use of multi-state consumer class actions.[213] This is because state-law variations may "swamp any common issues and defeat predominance"[214]—one of the pre-requisites to instigating a consumer class action.[215] This contrasts with an antitrust class action, where concepts like negligence that may vary across states, would not need to be considered as a matter of law.[216] Moreover, some state consumer protection laws do not allow commercial enterprises to sue in their roles as consumers,[217] which contrasts with antitrust where direct purchasers like business enterprises can sue for damages.[218] Note also that many states have repealed *Illinois Brick* under *Illinois Brick* repealer statutes,[219] which had precluded indirect purchasers from bringing antitrust damages claims, and so may offer a much wider remit of enforcement.[220] Thus, as Carrier and Tushnet conclude, "antitrust [may]

---

[212] Carrier & Tushnet, *supra* note 56, at 1865.

[213] *Id.* at 1865-66.

[214] Castano v. Am. Tobacco Co., 84 F.3d 734, 741 (5th Cir. 1996) ("In a multistate class action, variations in state law may swamp any common issues and defeat predominance"); Georgine v. Amchem Prod., Inc., 83 F.3d 610, 618 (3d Cir. 1996) (holding that the predominance requirement for certifying a class action was not met in this case because the factual and legal differences, "when exponentially magnified by choice of law considerations, eclipse any common issues…"); *In re* Am. Med. Sys., Inc., 75 F.3d 1069, 1085 (6th Cir. 1996) (finding that certification was improper because, among other things, "[t]he district judge…failed to consider how the law of negligence differs from jurisdiction to jurisdiction…").

[215] FED. R. CIV. P. 23; *see, e.g.*, Comcast Corp. v. Behrend, 569 U.S. 27, 34 (2013) (holding that a class was improperly certified because "[q]uestions of individual damage calculations will inevitably overwhelm questions common to the class").

[216] *See id*. at 36.

[217] *See, e.g.*, MacDonald v. Thomas M. Cooley L. Sch., 724 F.3d 654, 660-61 (6th Cir. 2013) (holding that the Michigan Consumer Protection Act does not cover purchases for business purposes).

[218] *See* Hanover Shoe, Inc. v. United Show Machinery Corp., 392 US 481 (1968); Ill. Brick Co v. Illinois, 431 US 720 (1977) [hereinafter *Illinois Brick*].

[219] *See, e.g.*, MINN. STAT. ANN. § 325D.57 (providing for treble damages to be available to any person injured "directly or indirectly"); Neb. Rev. Stat. Ann. § 59-821 (providing for the pass-on defence); CAL. BUS. & PROF. CODE § 16750 (providing for treble damages for "any person who is injured in his or her business or property by reason of anything forbidden or declared unlawful by this chapter, regardless of whether such injured person dealt directly or indirectly with the defendant"); MICH. COMP. LAWS ANN. § 445.778 (providing for direct and indirect damages actions); N.Y. GEN. BUS. LAW § 340 (providing for the pass-on defence when indirect purchasers are involved); VT. STAT. ANN. tit. 9, § 2465 (providing that the fact that the injured person has not dealt directly with the defendant is not a bar to recovery). Sometimes cases have repealed *Illinois Brick*. *See* Comes v. Microsoft Corp., 646 N.W.2d 440, 448 (Iowa 2002); *see also* Freeman Indus., LLC v. Eastman Chem. Co., 172 S.W.3d 512, 517 (Tenn. 2005).

[220] *Illinois Brick*, 431 US 720.

[provide] remedies that would otherwise be unavailable to plaintiffs who were themselves deceived by a monopolist."[221]

Consider also the contrasting evidentiary realities of antitrust enforcement vis-à-vis consumer protection, which may also serve to render the former a much broader and potent form of *ex-post* paternalism. In antitrust cases, the institutional use of sophisticated econometric techniques and economic analysis is now extensively relied upon to establish infringements.[222] For example, the Federal Trade Commission (FTC), which is in charge of enforcing both the antitrust and consumer protection laws, deploys staff economists and uses economic analysis as a standard practice in its enforcement of the antitrust rules.[223] This contrasts with institutional practice in consumer protection cases. For consumer protection issues evidence is usually more subjective in nature, relying on surveys and opinions.[224]

The enforcement consequences of this narrower evidentiary toolkit illustrate how consumer protection can be a smaller stick than antitrust. Note that in *LabMD*, for instance, the court granted the defendant's motion for a stay pending appeal based partly on the fact that the FTC's showing of consumer harm was "only speculative."[225] Further, the FTC relied on various dictionary definitions of the word "likely" in assessing the likelihood of harm, with the court implying a lack of sophistication in such a methodology choice.[226] Similar conclusory analyses held little success also in *D-Link*, where the Court dismissed the claim with leave to amend based partly on the fact that the FTC made "out a mere possibility of injury at best."[227] The lack of any identification of consumer harm was even more striking given that the FTC professed itself to have undertaken "a thorough investigation before

---

[221] Carrier & Tushnet, *supra* note 56, at 1866.

[222] *See* Michael R. Baye & Joshua D. Wright, *How to Economize Consumer Protection*, ANTITRUST SOURCE 1, 2 (2018).

[223] *Id.* at 1 ("Bureau of Competition staff lawyers and the economists in the Bureau of Economics commonly work together to use economic analysis to identify, analyze, and prosecute cases. These analyses often involve statistical and econometric techniques that facilitate decision-making based on scientific evidence based on likely harm to competition or consumers").

[224] *Id.* ("[T]he typical approach to a consumer protection matter relies upon a combination of surveys and subjective opinions to establish the facts relevant to a consumer protection dispute…").

[225] LabMD, Inc. v. Fed. Trade Comm'n, 678 F. App'x 816, 821 (11th Cir. 2016).

[226] *Id.* ("The FTC looked to different dictionaries and found different definitions of the word 'likely.' It is through this approach that it argues that its construction is correct, considering the statute's context as a whole. *Even respecting this process*, our reading of the same dictionaries leads us to a different result") (emphasis added).

[227] Fed. Trade Comm'n v. D-Link Sys., Inc., No. 3:17-CV-00039-JD, 2017 WL 4150873, at *15 (N.D. Cal. Sept. 19, 2017) ("The FTC does not identify a single incident where a consumer's financial, medical or other sensitive personal information has been accessed, exposed or misused in any way, or whose IP camera has been compromised by unauthorized parties, or who has suffered any harm or even simple annoyance and inconvenience from the alleged security flaws in the DLS devices. The absence of any concrete facts makes it just as possible that DLS's devices are not likely to substantially harm consumers, and the FTC cannot rely on wholly conclusory allegations about potential injury to tilt the balance in its favor").

filing the complaint."[228]

While the foregoing analyses perhaps show the potential for under-enforcement if consumer protection institutions were to govern antitrust issues, they counterintuitively may be a desirable state of affairs from the perspective of moral hazard in the context of the regulation of irrationality. Braced with a much less imposing and paternalistic enforcement regime, consumers may feel less protected and, hence, may invest in developing themselves into more rational decision makers. On the other hand, a more protectionist regime could serve to perpetuate the opposite effect, with the result being lower levels of societal rationality. This re-emphasizes the concern for cognitive hazards—that is, the frustration of rational development because of paternalistic interferences.[229]

C. Higher penalties

Another reason why consumers may feel more protected under an antitrust regime and hence invest less in the development of their own rationality is the significant difference in punitive measures between antitrust and consumer protection. The magnitude of these penalties and their concomitant chilling effect on business conduct has often been cited as a reason for limiting the scope of antitrust enforcement to practices that only cause significant harm to markets.[230] Less has been said, however, about its potential "interference with competitive market forces [which] may adversely affect the development of rational behaviour."[231]

Consider in this respect the significant difference in administrative fines between antitrust and consumer protection. In the European Union (EU), for example, substantial fines may be imposed for antitrust

---

[228] *Id.*

[229] Klick & Mitchell, *supra* note 209, at 1626 ("Moral hazards arise because paternalistic regulations reduce an individual's motivation to act deliberately and carefully, and motivation level mediates many psychological biases. What we term 'cognitive hazards' arise when paternalistic regulations interfere with information searches, educational investments, and feedback that would occur in the absence of paternalistic interventions and that are important to the individual's development of effective decision-making skills and strategies").

[230] Carrier & Tushnet, *supra* note 56, at 1848 (describing how the application of antitrust law requires harm to the "market as a whole" along with other requirements like market definition, monopoly power, and the potential need to rebut pro-competitive justifications in exclusionary cases. However once "these stringent measures are satisfied, antitrust comes down hard on the defendant, who is potentially liable for treble damages, attorneys' fees, and costs"); Harvard Law Review Ass'n, *supra* note 56, at 1243 (describing how in the context of deception the prospect of "treble damages in antitrust cases…could deter companies from truthful and pro-competitive speech (such as ordinary advertising) due to their fear that it will be mistaken for deception"); *see also* PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 780 (4th ed. 2018) ("[T]he prospect of treble damages will attract many barely colorable challenges if § 2 comes to recognize [business torts] as exclusionary").

[231] Klick & Mitchell, *supra* note 209, at 1640.

infringements.[232] Under Article 23(2) Regulation 1/2003, fines may be imposed for up to ten percent of an undertaking's turnover in the preceding business year.[233] This amount overshadows even the EU's recent push towards what has been described as "high financial penalties for breaching consumer law…"[234] Under Directive (EU) 2019/2161, EU member states must now enable the possibility of imposing a maximum fine of four percent annual turnover.[235] Where information on annual turnover is unavailable, the maximum fine shall be €2 million.[236] This latter number pales in comparison, for instance, to some of the more recent (and famous) competition law fines: a more than €100 million fine against Google levied by the Italian antitrust authority,[237] a €35 million fine against three steel forging companies levied by the German antitrust authority,[238] a €2.93 billion fine against truck producers levied by the European Commission,[239] and a €1.06 billion fine against Intel levied by the European Commission.[240]

Noteworthy also is the prospect of mandatory treble damages in the United States,[241] which has been described as "an unusually generous statute to plaintiffs."[242] Consumers harmed by antitrust infringements may bring private damages actions against the infringing firm(s).[243] If they are

---

[232] RICHARD WHISH & DAVID BAILEY, *Articles 101 and 102 - public enforcement by the European Commission and national competition authorities under Regulation 1/2003, in* COMPETITION LAW (9th ed. 2018) ("Article 23(2) provides for very substantial fines to be imposed where undertakings infringe Articles 101 and 102 TFEU…").

[233] Council Regulation, 2003 O.J. (L 1) 3, art. 23(2).

[234] DLA Piper, *Consumer Law Enforcement – Recent EU/UK Legislative Developments and Future Prospects*, DLA PIPER (28 April 2020), https://www.dlapiper.com/en/uk/insights/publications/2020/04/consumer-law-enforcement/.

[235] Council Directive, 2019 O.J. (L 328) ¶ 13.

[236] *Id.*

[237] Autorità Garante della Concorrenza e del Mercato (Italian Competition Authority) Pres Release A529-ICA, Google Fined Over 100 Million for Abuse of Dominant Position (May 13, 2021), https://en.agcm.it/en/media/press-releases/2021/5/A529.

[238] Bundeskartellamt Press Release, Bundeskartellamt Imposes Fines on Steel Forging Companies (Feb. 4, 2021), https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/04_02_2021_Stahlschmieden.html.

[239] European Commission Press Release IP/16/2582, Antitrust: Commission Fines Truck Producers €2.93 Billion for Participating in a Cartel (July 19, 2016).

[240] European Commission Press Release IP/09/745, Antitrust: Commission Imposes Fine of €1.06 bn on Intel for Abuse of Dominant Position; Orders Intel to Cease Illegal Practices (May 13, 2009). European Commission Press Release IP/09/745, Antitrust: Commission Imposes Fine of €1.06 bn on Intel for Abuse of Dominant Position; Orders Intel to Cease Illegal Practices (May 13, 2009), annulled on remand Case T-286/09 RENV, Intel Corp. Inc. v. European Comm'n, ECLI:EU:T:2022:19.

[241] Clayton Act, 63 Pub. L. No. 212, 38 Stat. 730, 731 (1914). See the current version of the law at 15 U.S.C. § 15(a).

[242] KEITH N HYLTON, ANTITRUST LAW: ECONOMIC THEORY & COMMON LAW EVOLUTION 49 (2009) (describing treble damages as "unusually generous" and how, as a consequence, "[i]t is no wonder that the federal courts have been on guard for plaintiffs who have tried to convert ordinary business torts (and even mundane gripes) into antitrust claims").

[243] *See* Thomas Obersteiner, *Private Antitrust Enforcement in the US and the EU* 19 (Working Paper, 2019),

successful—a prospect made all the more likely by broad discovery rules[244]—the damages awarded are then automatically multiplied three-fold,[245] with the aim being to provide a magnified deterrent effect on future violators.[246] Moreover, the U.S. government is also entitled to treble damages if it itself is a victim of an antitrust infringement.[247] Attorney fees are also reimbursed if the plaintiff is successful.[248]

Thus, in light of such litigation-inducing incentives and abilities,[249] consumers may feel less need to correct their own irrational behaviour. Knowing *ex-ante* that *ex-post* they can get compensated and then some, the incentive to engage in developing rational tendencies may become diluted.

CONCLUSION

Digital platform markets seem to be exhibiting a new kind of potentially nefarious conduct that does not seem to fit easily under existing competition frameworks and rules. Hence, this article identified the need for a new class of conduct to be recognised under antitrust law, which the European Commission is entitled to adopt as the list of abuses in Article 102 TFEU is not exhaustive.[250]

The article advanced a conceptual framework containing necessary and sufficient conditions for a substantial and non-transient behavioural market failure to occur in order to move towards a more workable antitrust enforcement policy for cognitive foreclosure purposes. It is hoped that in the wake of digital platforms becoming more and more scrutinised by antitrust enforcers and more sophisticated in their capacity to cognitively foreclose

---

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3468473.

[244] *See* FED. R. CIV. P. 26-37; *see also* Obersteiner, *supra* note 243.

[245] Robert H. Lande, *Are Antitrust "Treble" Damages Really Single Damages?*, 54 OHIO ST. L.J. 115, 115 (1993) ("Everybody 'knows' that antitrust violations lead to mandatory treble damages and attorneys' fees").

[246] Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc., 473 U.S. 614, 635 (1985) ("The treble-damages provision wielded by the private litigant is a chief tool in the antitrust enforcement scheme, posing a crucial deterrent to potential violators").

[247] 15 U.S.C. § 15a ("Whenever the United States is hereafter injured in its business or property by reason of anything forbidden in the antitrust laws it may sue therefor in the United States district court for the district in which the defendant resides or is found or has an agent, without respect to the amount in controversy, and shall recover threefold the damages by it sustained and the cost of suit"); *cf.* Harry First & Spencer Weber Waller, *Pairing Public and Private Antitrust Remedies* (N.Y.U. Law & Economics Research Paper, Paper No. 19-23, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3417356 (noting the limited use of private damages actions by the U.S. government).

[248] 15 U.S.C. § 15a; *see also* Edward D. Cavanagh, *Attorneys' Fees in Antitrust Litigation: Making the System Fairer*, 57 FORDHAM L. REV. 51 (1988).

[249] Note that as many as 95 percent of antitrust cases have at one point been privately enforced; *see* STEVE SALOP & LAWRENCE WHITE, PRIVATE ANTITRUST LITIGATION: AN INTRODUCTION AND FRAMEWORK (1987).

[250] Case C-395/96 P, Compagnie Maritime Belge Transports and Others v. Commission, ECLI:EU:C:2000:132, ¶ 112 ("It is settled case law that the list of abusive practices contained in [Article 102 TFEU] is not an exhaustive enumeration of the abuses of a dominant position prohibited by the Treaty").

competition, this framework can aid antitrust decision makers in appropriately identifying liability in these kinds of cases.