

2. Market Definition

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I. INTRODUCTION

Monopolization, in the United States, and abuse of dominance, in the European Union, embody different philosophies about how best to police single firm conduct in competition law. Surprisingly, their disagreements end at market definition. Both doctrines define relevant markets by similar processes and use relevant markets for similar purposes. In some contexts, this type of agreement would be a welcome sight. Here, it reflects a pocket of confusion in each area of law.

This chapter describes the confusion of current market definition practices and takes some initial steps toward a more coherent approach. It begins, in Part II, with a brief review of the common justifications for defining markets in single firm conduct cases, and a brief restatement of the common standards for defining markets. Part III then turns a critical eye to the assumed connections between current market definition practices and the substantive purposes the resulting markets are meant to serve. Parts IV and V sketch the outline of a more coherent approach to market definition in single firm conduct cases. The idea behind this approach is that markets should not be defined by rote application of omnibus standards, but should be defined by tests tailored to the specific purposes that relevant markets are meant to serve in a given application.

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II. COMMON STANDARDS

Everyone knows the standards for defining markets in single firm conduct cases. Advocates in both the US and the EU have spent decades intoning the same familiar language about interchangeability and the substitutes to which consumers may turn. The stated reasons for defining markets, and the uses to which those markets are put, are also similar across jurisdictions.

A. Market definition in monopolization cases

In the United States, Section 2 of the Sherman Act makes it illegal for any person to ‘monopolize, or attempt to monopolize, or combine or conspire ... to monopolize’ any trade within the scope of interstate commerce.² Interpreting this sparse language, the US Supreme Court has held that the offense of monopolization consists of two elements: ‘(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident’.³ The related offense of attempted monopolization edges away from the threshold requirement of monopoly power, replacing it instead with the firm’s probable acquisition of monopoly power as a result of its anticompetitive conduct.⁴

Monopoly power, or its imminent acquisition, is thus a necessary element in proving any violation of Section 2. So, what is monopoly power? The Supreme Court has described it as ‘the power to control prices or exclude competition’.⁵ But this is a very broad net. Nearly every competitor has some power to control prices, as well as some capacity to exclude at least certain types of competition.⁶ Alternatively, monopoly power is sometimes defined as

² 15 USC § 2.

³ *United States v Grinnell Corp* 384 US 563, 570–71 (1966).

⁴ See *Spectrum Sports Inc v McQuillan* 506 US 447, 459 (1993) (‘[P]etitioners may not be liable for attempted monopolization under § 2 of the Sherman Act absent proof of a dangerous probability that they would monopolize a particular market and specific intent to monopolize’); *Image Technical Services Inc v Eastman Kodak Co* 125 F 3d 1195, 1202 (9th Cir 1997) (observing that monopolization and attempted monopolization offenses ‘are similar, differing primarily in the requisite intent and the necessary level of monopoly power’).

⁵ *United States v E. I. du Pont de Nemours & Co* 351 US 377, 391 (1956) (Cellophane case).

⁶ See *Northern Securities Co v United States* 193 US 197, 406 (1904) (Holmes J, dissenting).

something like substantial market power.⁷ This, is a little more descriptive, but only a little. If market power is defined as the ability to price above a competitive level, then identifying monopoly power by this definition requires that two judgements be made, neither guided by clear standards. First, a determination must be made about what a ‘competitive’ price would be.⁸ Second, another determination must be made about whether the current or predicted price is ‘substantially’ greater than this competitive price.

The practical difficulty of applying either of the above definitions of monopoly power drives most litigants to follow a different path when seeking to establish a violation of Section 2. Ever since the decision of *United States v Aluminum Company of America* in 1945, courts have endorsed an assumption that a large share of a relevant market—something on the order of an 80 or 90%—is evidence of a firm’s monopoly power in that market.⁹ This is not to say that a large market share is always indicative of monopoly power. But, according to conventional thinking, a large share is at least a necessary condition for possessing monopoly power.¹⁰

This, of course, requires the definition of relevant markets, and the Supreme Court has supplied several standards for the exercise. By one standard, the scope of a relevant market is to be ‘drawn narrowly to exclude any other product to which, within reasonable variations in price, only a limited number of buyers will turn; in technical terms, products whose “cross-elasticities of demand” are small’.¹¹ By another standard, relevant markets are ‘composed of products that have reasonable interchangeability for the purposes for which

(‘According to popular speech, every concern monopolizes whatever business it does, and if that business is trade between two states it monopolizes a part of the trade among the states. Of course, the statute does not forbid that. It does not mean that all business must cease’).

⁷ See *Eastman Kodak Co v Image Technical Services Inc* 504 US 451, 481 (1992) (‘Monopoly power under § 2 requires, of course, something greater than market power under § 1’).

⁸ See Daniel A Crane, ‘Market Power Without Market Definition’ (2014) 90 *Notre Dame Law Review* 31, 38–39.

⁹ See *United States v Aluminum Co of America* 148 F 2d 416, 424 (2d Cir 1945); *Grinnell* (n 3) 571 (Alcoa) (‘The existence of [monopoly] power ordinarily may be inferred from the predominant share of the market’).

¹⁰ See, eg, Duncan Cameron, Mark Glick, and David Mangum, ‘Good Riddance to Market Definition?’ (2012) 57 *Antitrust Bulletin* 719, 720–21.

¹¹ *Times-Picayune Publishing Co v United States* 345 US 594, 612 n 31 (1953).

they are produced—price, use and qualities considered’.¹² By another standard, relevant markets can be identified by the recognition of a product’s ‘peculiar characteristics and uses’.¹³ By yet another standard, markets—or, at least, ‘sub-markets’—may be recognized by ‘practical indicia’ such as industry or public recognition of a market, the presence of unique production facilities, or the observation of distinct customers, distinct prices, or other distinct features.¹⁴

Other tests supplement these standards. Initially developed for horizontal merger analysis,¹⁵ the Hypothetical Monopolist Test (HMT) defines markets around groups of competitors who, if they were to band together as monopolists, would elect to raise prices by at least a small but substantial amount for some period of time. In the merger context, the HMT is an iterative algorithm that starts from a candidate market as small as the merging parties and progressively expands the candidate market until the group of competitors it encompasses would have the joint market power and profit motive to exercise the hypothesized price increase.¹⁶ The HMT can be used to define relevant markets in monopolization cases,¹⁷ but sometimes requires modification to function usefully in this context—a point to which we will return shortly.

B. Market definition in abuse of dominance cases

In the European Union, Article 102 of the Treaty on the Functioning of the European Union prohibits the ‘abuse by one or more undertakings of a dominant position’ within at least a substantial part of the internal market.¹⁸ In contrast to the Sherman Act, Article 102 spells out several of the specific acts it aims to prohibit. It explains that abuse of a dominant position includes

¹² *Cellophane* (n 5) 404.

¹³ *United States v E. I. du Pont de Nemours & Co* 353 US 586, 593–94 (1957) (du Pont-General Motors case).

¹⁴ *Brown Shoe Co v United States* 370 US 294, 325 (1962); see also *Grinnell* (n 3) 572 (endorsing, in dicta, the use this test in monopolization cases).

¹⁵ See Gregory J. Werden, ‘The 1982 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm’ (2003) 71 *Antitrust Law Journal* 253.

¹⁶ United States Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (19 August 2010) § 4.1.1.

¹⁷ See, eg, *United States v Microsoft Corp* 253 F 3d 34, 81 (DC Cir 2001).

¹⁸ Consolidated Version of the Treaty on the Functioning of the European Union [2012] OJ C326/47, art 102.

‘imposing unfair purchase or selling prices’, ‘limiting production ... to the prejudice of consumers’, and excluding rivals or otherwise distorting the competitive process, among other things.¹⁹

By its terms, Article 102 only applies to the conduct of an undertaking with a ‘dominant position’.²⁰ So, what is a dominant position? In *United Brands*, the Court of Justice described dominance as ‘a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers, and ultimately of its consumers’.²¹ In guidance, the Commission has also contributed its view that dominance occurs when ‘competitive constraints are not sufficiently effective’, such that an undertaking ‘enjoys substantial market power over a period of time’.²²

As in the case of US monopolization, these efforts to define dominance do little more than gesture at the concept. Again, the definitions fail to clearly separate dominant undertakings from the large mass of undertakings with at least some market power. Again, the effort to equate dominance with ‘substantial market power’ stumbles at the difficulty of identifying substantial market power. And, again, the cases have addressed these difficulties by interpreting large shares of relevant markets as the primary indicator of dominance.²³ Market shares of 70 to 80% have been described as ‘a clear indication of the

¹⁹ Ibid.

²⁰ Ibid.

²¹ Case 27/76 *United Brands Co v Commission* [1978] ECR 207, para 65.

²² Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C45/7, para 10.

²³ See Case C-62/86 *AKZO Chemie BV v Commission* [1991] ECR 3359, para 60 (stating that ‘the Court has held that very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position’, citing Case 85/76 *Hoffman-La Roche & Co AG v Commission* [1979] ECR 461, and holding that the inference of dominance applies ‘where there is a market share of 50% such as that found to exist in this case’); Commission Notice on the Definition of Relevant Market for Purposes of Community Competition Law [1997] OJ C372/5, para 10 (‘[A dominant position] would usually arise when a firm or group of firms accounted for a large share of the supply in any given market, provided that other factors analysed in the assessment (such as entry barriers, customers’ capacity to react, etc.) point in the same direction’. (internal footnotes omitted)).

existence of a dominant position',²⁴ with shares greater than this extending beyond dominance into something closer to monopoly.²⁵

This places market definition in roughly the same position in abuse of dominance cases that it occupies in monopolization cases. The processes of market definition are also similar. For example, implementing regulation defines a relevant market by language similar to the US standard of reasonable interchangeability: 'A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use'.²⁶ The cross-elasticity standard is also used: 'Factors relevant to the assessment of the relevant product market include the analysis of ... cross-price elasticity of demand'.²⁷ As explained by the Commission in the Notice on Market Definition, the goal of market definition is to identify the competitive constraints that act upon an undertaking: 'Basically, the exercise of market definition consists in identifying the effective alternative sources of supply for the customers of the undertakings involved'.²⁸ This recalls the HMT, which is also expressly adopted as a potential standard when defining relevant markets in abuse of dominance cases.²⁹

III. COMMON PROBLEMS

Much could be said about the various standards for defining relevant markets,³⁰ but the more intriguing puzzle is the assumption—common to both the US and the EU—that current market definition practices connect relevant

²⁴ Case T-30/89 *Hilti AG v Commission* [1991] ECR II-1439, para 92.

²⁵ See *Hoffman-La Roche* (n 23) para 39 (distinguishing a dominant position from 'a monopoly or a quasi-monopoly').

²⁶ Commission Implementing Regulation (EU) No 1269/2013 of 5 December 2013 amending Regulation (EC) No 802/2004 implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings [2013] OJ L336/1, Annex 1, sec 6.1; see also Commission Notice on the Definition of Relevant Market (n 23) para 9 (adopting this definition in other contexts).

²⁷ Commission Implementing Regulation (n 26).

²⁸ Notice on Definition of Relevant Market (n 22), para 13.

²⁹ *Ibid* paras 15–17.

³⁰ See Sean P Sullivan, 'Modular Market Definition' (2021) 55 UC Davis Law Review (forthcoming).

markets to the underlying concerns of the substantive law. What makes a large share of a relevant market evidence of monopoly power or occupancy of a dominant position? What makes any of the market definition standards helpful in assessing allegedly exclusionary or abusive conduct? The conventional answers to these questions are not inspiring. They do, however, offer glimpses into the confusion that currently envelops market definition practice.

A. Markets as threshold tests

One conventional argument for defining markets in single firm conduct cases is the notion that only the conduct of a firm with a large enough share of a relevant market warrants special scrutiny. Consistent with this idea, market shares below about 50 percent are treated as inadequate to establish monopoly power in US courts,³¹ while something like 40 percent or a little less gates enforcement of Article 102 in the EU.³² This positions market definition, and market share analysis, at the threshold of the competitive effects inquiry,³³ with market shares below minimum thresholds ending inquiries before they get to

³¹ See, eg, *Bailey v Allgas Inc* 284 F 3d 1237, 1250 (11th Cir 2002) ('A market share at or less than 50% is inadequate as a matter of law to constitute monopoly power.');

Rebel Oil Co v Atlantic Richfield Co 51 F 3d 1421, 1438 (9th Cir 1995) (collecting 'numerous cases' that hold 'a market share of less than 50 percent is presumptively insufficient'); see also Phillip E Areeda and Herbert Hovenkamp, *Antitrust Law*, vol 2B (4th edn, Wolters Kluwer 2014) para 532c (collecting other holdings).

³² Guidance on the Commission's enforcement priorities (n 22) para 14 ('The Commission considers that low market shares are generally a good proxy for the absence of substantial market power. The Commission's experience suggests that dominance is not likely if the undertaking's market share is below 40% in the relevant market.');

Commission, 'DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses' (2005) para 34 <<https://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>> accessed 10 June 2021 (DG competition discussion paper)³¹ ('[A]lthough also undertakings with market shares below 40% could be considered to be in a dominant position.... [U]ndertakings with market shares of no more than 25% are not likely to enjoy a (single) dominant position on the market concerned.').

³³ See William M Landes and Richard A Posner, 'Market Power in Antitrust Cases' (1981) 94 *Harvard Law Review* 937, 972 (describing the usual treatment of market power analysis in rule of reason cases as "'a threshold condition'"); Guidance on Enforcement Priorities (n 22) para 9 ('"The assessment of whether an undertaking is in a dominant position and of the degree of market power it holds is a first step in the application of Article 82."').

competitive effects analysis.³⁴ That raises a question: why should low shares of a relevant market have this abortive effect?

One possible justification for the approach is the frequent suspicion that a firm without a large share of a relevant market cannot have the market power necessary to raise monopolization or abuse of dominance concerns. This might make sense if market definition controlled the price elasticity of market demand. But no current market definition standard except the HMT has any serious connection to market demand elasticity. The problem with this justification is thus that the relationship it posits is not a reliable product of current practice. As William Landes and Richard Posner observed—over forty years ago—without controlling for demand elasticity, ‘a given market share is neither necessary nor sufficient for a firm to be able to raise prices above the competitive level’.³⁵ While tests like the HMT offer one context where market share may have a consistent relationship with market power, the traditional practice of lumping together all different tests of market definition leaves Landes and Posner’s critique as true today as it was back then.³⁶ A large share of a relevant market does not always indicate market power, and a small share does not preclude it.³⁷

Another possible justification for the threshold-test interpretation is that a firm without a large share of a relevant market is not economically significant enough to warrant scrutiny under monopolization or abuse of dominance law. A focus on economic significance motivated the US Supreme Court in its articulation of the practical indicia standard,³⁸ and similar justifications have been offered for the size of a hypothesized price increase under the HMT.³⁹

³⁴ See Frank H Easterbrook, ‘The Limits of Antitrust’ (1984) 63 Texas Law Review 1, 17–18 (advocating for the use of a market power ‘filter’ in antitrust analysis).

³⁵ Landes and Posner (n 33) 952–53.

³⁶ See Commission Notice on the Definition of Relevant Market (n 23) para 52 (contemplating the definition of relevant markets by a combination of different factors); Sullivan (n 30) § I (observing the apparently simultaneous application of different market definition standards in antitrust opinion).

³⁷ Franklin M Fisher, ‘Diagnosing Monopoly’ (1979) 19(2) Quarterly Review of Economics & Business 7, 18 (commenting on false belief that small market share shows the absence of monopoly power while large market share shows its presence and noting that what matters is what happens to market share when monopoly profits are sought).

³⁸ See, eg, *Brown Shoe Co v United States* 370 US 294, 325 (1962).

³⁹ See Areeda and Hovenkamp (n 31) para 537a.

This focus on economic significance might make sense if market definition did indeed reliably identify markets of significant economic importance. But current practice does no such thing. Markets defined by the HMT are often narrow⁴⁰ and bear no guarantee of economic significance.⁴¹ Markets defined by substitutability inquiries similarly focus on the closeness of products, not the economic significance of those products as a class. The practical indicia test might capture markets of reliable economic significance⁴² but, again, the typical practice of defining markets by lumping together different standards dilutes this relationship. In short, under current practice, a firm's large share of a relevant market says little to nothing about its size or importance in a local, national, or global economy.

B. Markets as sets of substitutes

Another common argument for defining markets in single firm conduct cases is the idea that doing so helps to identify sets of reasonable substitutes for the products of the firm in question. The intuitive justification for this project appears to be a belief that markets are identifiable scopes of trade in the world, bounded by the similarity of products in serving particular purposes or satisfying particular needs.⁴³ The current author and others have argued that it is a category error to think of relevant markets as constructs with any presence in the world or permanence outside of a given inquiry.⁴⁴ But, even setting aside this error, what relevance would identification of a given set of substitutes have for assessing monopolization and abuse of dominance concerns?

⁴⁰ See Horizontal Merger Guidelines (n 16) § 4 para 8 ('Relevant antitrust markets defined according to the hypothetical monopolist test are not always intuitive and may not align with how industry members use the term "market."'); Sullivan (n 30) § II.A (discussing the tendency of most modern market definition standards to identify narrow markets focused on particular concerns).

⁴¹ See David Glasner and Sean P Sullivan, 'The Logic of Market Definition' (2020) 83 Antitrust Law Journal 293, 339–40.

⁴² See Sullivan (n 30) § I.B.

⁴³ See *ibid* 303–07 (discussing attempts to identify 'natural' market boundaries by reference to substitutability).

⁴⁴ *Ibid* 307–12; Magali Eben, 'The Antitrust Market Does Not Exist: Pursuit of Objectivity in a Purposive Process' (2021) *Journal of Competition Law and Economics* (forthcoming); Steven C. Salop, 'The First Principles Approach to Antitrust, Kodak, and Antitrust at the Millennium' (2000) 68 *Antitrust Law Journal* 187, 188–89.

That question can be sharpened by the well-known *Cellophane* fallacy. As generations of students have learned, the US Supreme Court made a serious mistake in its market definition analysis in *United States v E.I. du Pont de Nemours & Co.*⁴⁵ Translating the error into HMT terms, the Court defined the relevant market by asking whether DuPont would have found it profitable to increase the price of its cellophane product. Finding this would not be profitable—since DuPont was presumably already pricing as high as its market power would allow—the Court expanded the relevant market to include products that were only realistic substitutes at DuPont’s already elevated prices. This expansion of the relevant market reduced DuPont’s share of the market—perversely allowing DuPont’s exercise of market power to masquerade as evidence of DuPont’s lack of market power.

The error of the *Cellophane* fallacy has been well aired in the scholarly literature,⁴⁶ and it now motivates cautionary qualifications in prescriptions of the HMT for use in monopolization and abuse of context cases.⁴⁷ For example, it is frequently said that a competitive price must be used as the baseline price when attempting to apply the HMT to single firm conduct analysis.⁴⁸ This is not exactly right. We will shortly return to this point with examples where the *Cellophane* fallacy does and does not apply in the single firm conduct context.

⁴⁵ *Cellophane* (n 5) 380–81.

⁴⁶ The earliest clear articulation of the error seems to be George W Stocking, ‘Economic Tests of Monopoly and the Concept of the Relevant Market’ (1957) 2 *Antitrust Bulletin* 479. For modern recitations, see Salop (n 44) 197–98, Richard A Posner, *Antitrust Law* (2nd edn, University of Chicago Press 2001) 150–51.

⁴⁷ Eg, Commission Notice on the Definition of Relevant Market (n 23) para 19 (noting the *Cellophane* problem); OECD, *Abuse of dominance in digital markets* (2020) 14 <www.oecd.org/daf/competition/abuse-of-dominance-in-digital-markets-2020.pdf> accessed 10 June 2021 (‘The core concepts of market definition in abuse of dominance cases are the same as those applied in merger cases. However, care must be taken when applying analytical techniques such as the hypothetical monopolist test in markets whose conditions may already have been shaped by market power.’); DG Competition discussion paper (n 32) para 15 (‘It is essential to take account of the fact that the SSNIP-test normally is based on the assumption that prevailing prices constitute the appropriate benchmark for the analysis. This assumption often does not hold in Article 82 cases.’).

⁴⁸ Eg, Patrick Massey, ‘Market Definition and Market Power in Competition Analysis: Some Practical Issues’ (2000) 31 *Economic & Social Review* 309, 323 (‘The cellophane trap means that a different approach is required in abuse of dominance cases.’).

First, however, a few additional points about current practice need to be addressed.

The underlying problem at issue in the *Cellophane* fallacy extends beyond the HMT. *All* efforts to define markets as sets of substitute products suffer from the same fundamental problem that beguiled the Court in *Cellophane*. Reasonable interchangeability, cross-price elasticity, the HMT—every substitution-based test of market definition is exposed to an interpretive problem known to economists since well before any of these tests were developed. As Fritz Machlup explained in 1952:

[O]ne must have certain prices, price ranges, or price relations in mind when one speaks of particular demand elasticities. The cross-elasticity of demand may be of very different magnitudes at different price relations and, hence, when making an estimate of the elasticity, one obviously thinks of the currently existing price relations. If we now say that the cross-elasticity of demand between two products is zero, it may refer only to the given price relation, while at others the cross-elasticities may be positive. Where this is the case, the monopoly position exists only within certain price ranges and is therefore an imperfect one.⁴⁹

Put another way, the very project of trying to identify a single set of substitute products is economically unsound. There is no *one* set of substitute products, only different sets of substitutes at different prices.⁵⁰ To focus on a useful set of substitutes, one must start from a clear understanding of what price range is relevant to an inquiry. That is possible—as addressed in more detail below—but it is not how relevant markets are defined or interpreted today.

⁴⁹ Fritz Machlup, *The Economics of Sellers' Competition* (John Hopkins Press 1952) 546–47.

⁵⁰ See Franklin M Fisher, 'Economic Analysis and "Bright-Line" Tests' (2008) 4 *Journal of Competition Law and Economics* 129, 132 ("The relevant facts of *Cellophane* are undisputed. At a high enough price for cellophane, there was substitution of other flexible wrapping papers. At lower, still profitable prices, there was not. Once one has stated that (and specified the prices), one has said all there is to say.').

C. Markets as collections of competitive constraints

One last argument for defining markets in single firm conduct cases is that doing so helps to identify the competitive constraints acting upon the firm in question. Franklin Fisher was an early advocate of this understanding of market definition in antitrust cases. In 1979, he explained that, if market definition is to facilitate analysis, it needs ‘to place in the relevant market those products and services and firms whose presence and actions can serve as a constraint on the policies of the alleged monopolist’.⁵¹ Fisher contended that the breadth of a relevant market should be whatever was needed to embrace the ‘significant constraints’ on market power:

[A] ‘market’ is something that can be monopolized. If you have left out significant constraints on power, the ‘market’ is too small. If you have kept in firms and products or services that are not significant constraints, the ‘market’ is too large.⁵²

Something analogous to Fisher’s constraints interpretation of market definition motivates enforcement practices in the EU. A 2005 DG Competition discussion paper states: ‘The main purpose of market definition is to identify in a systematic way the immediate competitive constraints faced by an undertaking’.⁵³ This language parallels that of the Commission’s 1997 Notice on the Market Definition,⁵⁴ which devotes an entire section to commenting on the various competitive constraints that may be identified in the process of defining relevant markets.⁵⁵

For abuse of dominance analysis, this focus on constraints is tethered to the substantive understanding of dominance itself. The Commission explains this point in the same 1997 notice:

The concept of relevant market is closely related to the objectives pursued under Community competition policy. ... Under the Community’s competition rules, a dominant

⁵¹ Fisher (n 37) 13.

⁵² Fisher (n 50) 133.

⁵³ DG Competition discussion paper (n 32) para 12.

⁵⁴ Commission Notice on the Definition of Relevant Market (n 23) para 2.

⁵⁵ Ibid paras 13–24.

position is such that a firm or group of firms would be in a position to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.⁵⁶

Other Commission guidance explains dominance as a situation in which ‘the undertaking’s decisions are largely insensitive to the actions and reactions of competitors, customers and, ultimately, consumers’.⁵⁷ Insensitivity to customers and competitors is thus seen as a necessary condition for dominance and market power.⁵⁸

There is undoubtedly something helpful in the constraints approach, but the usual articulation fails to capture what it is. To start, the simple equation of market power with the absence of competitive constraints is inconsistent with basic economics. All firms face competitive constraints. Even those with significant market power. Examples include workhorse models in industrial organization economics. A single price monopolist facing a competitive fringe exercises durable market power despite the presence of competitive constraints.⁵⁹ In many oligopoly models, firms likewise exercise durable market power despite the presence of direct competition from other firms.⁶⁰ These examples illustrate a general point. As courts have intuited since the dawn of modern competition law, all market power is exercised within the bounds of some set of competitive constraints.⁶¹

⁵⁶ Ibid para 10. This definition of dominance was articulated in *Hoffman-La Roche* (n 23) [38].

⁵⁷ Guidance on the Commission’s enforcement priorities (n 22) para 10.

⁵⁸ Ibid para 11 ([A]n undertaking which is capable of profitably increasing prices above the competitive level for a significant period of time does not face sufficiently effective competitive constraints and can thus generally be regarded as dominant’); DG Competition discussion paper (n 32) para 23 (‘For dominance to exist the undertaking(s) concerned must not be subject to effective competitive constraints. In other words, it thus must have substantial market power.’)

⁵⁹ See, eg, Louis Kaplow and Carl Shapiro, ‘Antitrust’ in A Mitchell Polinsky and Steven Shavell (eds), *Handbook of Law and Economics*, vol 2 (Elsevier 2007) 1073, 1180–83.

⁶⁰ See, eg, *ibid* 1083–86.

⁶¹ See, eg, *United States v Addyston Pipe & Steel Co* 85 F 271, 292 (6th Cir 1898) (observing that firms possessed a window of market power despite the presence of competitive constraints: ‘Within the margin of the freight per ton which Eastern manufacturers would have to pay to deliver pipe in pay territory, the defendants, by controlling two-thirds of the output in

A similar error underlies the notion that dominance over a market traces to the independence or insensitivity of a firm to the actions of others in the market. Consider the textbook single-price monopolist. No firm better captures the idea of dominance, yet the single-price monopolist is emphatically sensitive to, and dependent upon, the actions of its consumers. The monopolist raises its price until it is in the elastic portion of the demand curve, and the limit of its price is the threatened exit of the marginal consumer still willing to buy at the monopolistic price. The same point applies for competitors. Even a monopolist is typically sensitive to the prices of marginal substitute products and to changes like the expansion of firms in its competitive fringe.⁶² Again, all market power is subject to constraints.

There is, of course, an important role for competitive constraints in single firm conduct cases. In any given equilibrium, the addition of a new constraint might depress a firm's market power while the elimination of an existing constraint might increase it. The identification of these competitive constraints can be helpful in evaluating potential *changes* in a firm's market power as a result of its conduct.⁶³ What the identification of these constraints does not do is shed much light on the thing it is commonly said to illuminate: whether a given firm is a monopolist, occupies a dominant position, or is presently able to exercise substantial market power.

IV. A MORE COHERENT APPROACH

The single most reliable way to get market definition wrong is to try to define markets before deciding what questions need to be answered. Contrary to what seems to be standard practice today, market definition cannot usefully come before a determination of what exactly the competitive concern entails.⁶⁴

pay territory, were practically able to fix prices.');

Alcoa (n 9) 426 (similarly finding that 'within the limits afforded by the tariff and the cost of transportation, 'Alcoa' was free to raise its prices as it chose').

⁶² Lawrence J White, 'Market Power and Market Definition in Monopolization Cases: A Paradigm Is Missing' in W Dale Collins (ed), *Issues in Competition Law and Policy*, vol 2 (American Bar Association Section of Antitrust Law 2008) 913, 920 ('[D]emand for a monopolist's product should be expected to be sensitive (at the margin) to the prices of sellers of some substitutes ... and thus the monopolist's price should be expected to vary as well.').

⁶³ See Eben (n 44) 30 (suggesting something similar through a focus on the 'competitive constraints ... most appropriate to the alleged conduct and theory of harm').

⁶⁴ See Glasner & Sullivan (n 41) 312-15 (describing the theory-dependence of market

A single market also cannot generally serve every analytical purpose that might be needed. Helpful and reliable market definition starts from the questions that need to be answered and reasons backwards to the identification of markets responsive to those needs.⁶⁵ This may compel the definition of different relevant markets for different parts of the evaluative process.⁶⁶ All depends on what questions need to be answered.

So, what questions do need to be answered in single firm conduct cases? Let us focus, for now, on traditional market power concerns. Three categories of concerns could arise from the challenged conduct: (1) it could allow the firm gain new market power, (2) it could allow the firm to maintain existing market power, or (3) it could reflect the firm’s exercise of its existing market power. Within each of these broad categories of concern, subcategories could arise. Single firm conduct is not conventionally broken apart to this level of granularity—and we must save for another day a full exploration of all the possible permutations of concern—but this deconstruction helps to uncover some useful rules and guides to follow when defining relevant markets.

A. Conduct that increases market power (results in higher prices)

To start, consider a firm not presently in possession of monopoly power or a dominant position, but which threatens to acquire that status through its challenged conduct. The concern is a substantial increase in the firm’s market power: something that would allow it to raise prices relative to where they are now. Example fact patterns could include a merger from duopoly to monopoly or the acquisition of a essential patent by one of several current competitors. In the US, this type of conduct could be challenged as attempted monopolization.⁶⁷ In the EU, Article 102 arguably does not fit the facts—the conduct in question is creating a dominant position, not exploiting it—but a flexible

definition).

⁶⁵ See Sullivan (n 30) 33 (proposing a purpose-based approach to selecting between different methods of market definition).

⁶⁶ For specific discussion of defining multiple relevant markets, see Glasner and Sullivan (n 41) 330–33; Sullivan (n 30) 26–27.

⁶⁷ See n 2 (prohibiting ‘attempt to monopolize’).

enough interpretation of dominance could capture many of the interesting cases.⁶⁸

Helpful market definition, in this context, can borrow from the standard practices of market definition in horizontal merger analysis. Where exclusionary conduct is used to obtain new market power, a helpful relevant market collects those competitors that currently constrain the firm, and thus whose exclusion could result in an increase in the firm's market power. Something analogous to the HMT, starting from the current price, would be an appropriate test for identifying this type of market. The problem of the *Cellophane* fallacy does not apply, here, since these markets are being defined to evaluate potential increases in market power relative to whatever market power the firm may already have. The HMT may, however, require a larger-than-average hypothesized price increase to approximate the concept of *substantial* market power, at least where the firm in question appears to have little market power at present.⁶⁹

Next, consider a firm already in possession of monopoly power or a dominant position, but which threatens to obtain even more market power via the challenged conduct. In the US, this type of conduct could be challenged as simple monopolization.⁷⁰ In the EU, the dominant position of the firm would bring its conduct within the reach of Article 102. In either case, the inquiry involves two steps: (1) assessing whether the firm has monopoly power or a dominant position, and (2) assessing whether the firm's conduct is anticompetitive or constitutes an abuse of a dominant position. Each of these inquiries may be aided by a distinct relevant market.

As discussed above, large shares in a relevant market are often interpreted as proof of substantial market power. Without necessarily endorsing this practice, we can observe three properties of market definition necessary for a large share of a relevant market to support this interpretation. First, the market

⁶⁸ See n 18 (prohibiting 'abuse ... of a dominant position' (emphasis added)); Pinar Akman, *The Concept of Abuse in EU Competition Law: Law and Economic Approaches* (Hart Publishing 2012) 94 (tracing the original intent of Article 102 to the prevention of 'the dominant undertaking receiving advantages that would not be possible *but for* its dominance'). But cf n 32 (providing some flexibility for dominance to be found even at moderate share thresholds).

⁶⁹ See Glasner & Sullivan (n 41) 316–17 (explaining why the size of the hypothesized price increase in the HMT must match the magnitude of the anticipated exercise of market power).

⁷⁰ See *Grinnell* (n 3) 570–71.

would need to be defined by a process that controls in some way for demand elasticity.⁷¹ A process like the HMT does this indirectly through its hypothesized price increase: by construction, a monopolist in an HMT market has at least enough market power to implement a price increase of the hypothesized magnitude. Markets defined by abstract reference to substitutability or interchangeability offer no such guarantee. Second, the hypothesized price increase in the HMT would need to be large enough to equate a large market share with the possession of substantial market power.⁷² Exactly what constitutes *substantial* market power may be a fact-bound question and has not been adequately explored to date. Third, the problem of the *Cellophane* fallacy emphatically *does* apply in this situation, so care must be taken not to assess patterns of substitution at already elevated prices. If something like the HMT is used, then it must be implemented as a hypothesized price increase above an estimate of a competitive base price.⁷³

The above considerations apply only to the first inquiry in the challenge. Now consider the second inquiry. Even if the firm possesses significant market power, is its conduct reasonably capable of increasing that market power?⁷⁴ If market-based inferences are to be used in this second inquiry,⁷⁵ it will typically be helpful to define a different relevant market when doing so. The reason for this is that the purpose of the relevant market is now different. The point is no longer to establish the firm's market power—the purpose of the first relevant market—but to help evaluate the firm's ability to obtain additional market power through its challenged conduct. Intuitively, this second market definition exercise is analogous to that involved in the attempted monopolization

⁷¹ See generally Landes and Posner (n 33).

⁷² See n 69.

⁷³ Ibid 320–21.

⁷⁴ See Salop (n 44) 195 (observing that a firm's ability to price above marginal cost 'does not mean that the firm can maintain or enhance its power by engaging in specific conduct alleged to be anticompetitive').

⁷⁵ See Herbert Hovenkamp, *Federal Antitrust Policy: The Law of Competition and its Practice* 110–11 (5th edn. 2016) (citing predatory pricing, foreclosure, and tying as examples of conduct offenses that only makes sense if the firm in question has a large market share).

challenge. Helpful market definition can again follow the pattern of horizontal merger analysis and the *Cellophane* fallacy again ceases to be a problem.⁷⁶

As discussed above, the equation of monopoly power or a dominant position with a firm's possession of 'substantial market power' requires the hypothesis of an appropriately substantial price increase when using shares of an HMT market to assess the firm's possession of monopoly power or a dominant position. Does the same apply to HMT markets used to assess the firm's challenged conduct? How large must the hypothesized price increase be in this second market? These are difficult questions. While insignificant changes in market power may not warrant intervention, one would expect both monopolization and abuse of dominance to prohibit conduct which, though insignificant in isolation, may in aggregate have significant effects.⁷⁷ A reasonable minimum requirement is that the conduct 'relates' to the firm's current market power⁷⁸ or that it is reasonably capable of contributing to that market power.⁷⁹ Beyond this, some form of sliding scale may be appropriate, such that larger exclusionary effects are demanded of firms with lower initial market power. This would smooth the distinction between monopolization and attempted monopolization in US law.⁸⁰

B. Conduct that maintains market power (preserves current prices)

Now, consider single firm conduct that does not risk the creation of new market power, but instead risks entrenching, preserving, or otherwise operating to maintain the firm's existing market power. Example fact patterns may include a dominant incumbent's acquisition of a nascent but potentially disruptive rival or a monopolist's adoption of contracting practices that limit the

⁷⁶ Here, the focus of concern is an increase in market power, and that may be appropriately modeled by a price increase over the current-price baseline.

⁷⁷ See Phillip E Areeda and Herbert Hovenkamp, *Antitrust Law*, vol. 3 (4th edn, Wolters Kluwer 2015) para 651g ('Any single exclusionary act may seem trivial. ... [Yet] it may be fitting to presume the exclusionary act 'significant' or 'causally related' to the monopoly power being challenged.').

⁷⁸ Ibid ('[I]t must at least appear plausible to an informed observer that the exclusionary act could have had, or would probably have, a significant relationship to the defendant's monopoly.').

⁷⁹ Ibid (rephrasing as restraints that 'reasonably appear capable of making a significant contribution to creating or maintaining monopoly power').

⁸⁰ See n 69 and accompanying text.

ability or incentive of customers to trade with its rivals. In the US, conduct which has the effect of maintaining existing market power can be challenged as monopolization under Section 2.⁸¹ Recent cases have, however, narrowed the situations in which a monopolist may be obligated to allow its competitors to grow.⁸² In the EU, conduct that would limit production or development in order to maintain a dominant position is proscribed by Article 102.⁸³ Indeed, undertakings which hold a dominant position are frequently said to have ‘a special responsibility not to allow [their] conduct to impair genuine undistorted competition in the internal market’.⁸⁴ As in the previous discussion of monopolization challenges and their EU analogues, multiple relevant markets may be helpful in evaluating maintenance-of-market-power concerns.

The first relevant market to consider is a market defined and used to establish the firm’s current possession of substantial market power. This is the same exercise discussed in relation to the first inquiry in an acquisition-of-market-power challenge and does not require repetition here.⁸⁵ It should, however, be noted that the effectiveness of some tools of exclusion may depend upon a firm’s size and importance relative to its rivals. Examples include exclusion through volume discounts or exclusivity contracts, where the exclusionary potential of the conduct arises primarily because of the large size or importance of the firm. In some cases, the same relevant market used to establish the firm’s

⁸¹ See *Grinnell* (n 3) 570–71 (‘willful acquisition *or maintenance* of [monopoly] power’ (emphasis added)); *Aspen Skiing v Aspen Highlands Skiing* 472 US 585, 602 (1985) (‘purpose to create *or maintain* a monopoly’ (emphasis added)). See also Herbert Hovenkamp, ‘The Monopolization Offense’ (2000) 61 *Ohio State Law Journal* 1035, 1041 (‘[A] great deal of strategic behavior is concerned with the ‘maintenance’ rather than the acquisition of monopoly power.’).

⁸² See *Verizon Communications Inc v Law Offices of Curtis V. Trinko LLP* 540 US 398, 415–16 (2004) (‘The Sherman Act ... does not give judges carte blanche to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition.’).

⁸³ See *Hoffman-La Roche* (n 23) para 91 (including in the concept of abuse, behavior which ‘has the effect of hindering the maintenance of the degree of competition still existing in the market *or the growth of that competition*’ (emphasis added)).

⁸⁴ Case C-52/09 *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECR 527, para 24; see also Eleanor Fox, ‘Monopolization and Abuse of Dominance: Why Europe is Different’ (2014) 59 *Antitrust Bulletin* 129, 135 (‘[D]ominant firms have a special responsibility not to erect or maintain barriers that frustrate the access of nondominant firms to markets.’).

⁸⁵ See nn 71–73 and accompanying text.

present market power may double as a way of establishing the firm's relative size and importance when evaluating this type of exclusionary conduct.⁸⁶

Since a firm's current possession of substantial market power is no guarantee that its challenged conduct operates to maintain that power,⁸⁷ a separate inquiry is needed to identify which competitors may be limited or excluded by the challenged conduct and to assess whether these competitors would have more tightly constrained the dominant firm—eroding the firm's market power—but for the effect of the challenged conduct. As Lawrence White has explained, this aspect of maintenance-of-market-power challenges can itself be usefully deconstructed into two questions: (1) what would the relevant rivals' performance be (or have been) but for the exclusionary conduct of the dominant firm, and (2) what would the effect of this performance be (or have been) on the behavior of the dominant firm and the options available to consumers?⁸⁸

If market-based inferences are to be used in addressing either part of this inquiry, one market concept responsive to the maintenance-of-market-power concern would be something like a reverse HMT: a relevant market defined as a group of competitors who, if unrestrained by the firm's conduct, would likely expand or take other actions that would lead to a small but substantial depression of prices for some product sold by the monopolist or dominant firm. Note that this definition of a relevant market is easier to state than it is to operationalize. The hypothesis involves predicting both the future actions of firms *and* the effects of those actions on prices. Also, markets defined by this process may not be helpful in every case. Where only a single competitor is included in the relevant market, for example, the market adds nothing to a direct evaluation of White's two inquiries. But where multiple competitors are simultaneously constrained, or where future competitive constraints could arise from different

⁸⁶ See Hovenkamp (n 81) 1041 ('Much monopolistic conduct is rational behavior only on the premise that the firm is already a monopolist, and frequently the conduct is designed not so much to create monopoly in a secondary market as to maintain the dominant firm's position in the primary market.').

⁸⁷ See n 74; Thomas G Krattenmaker, Robert H Lande and Steven C Salop, 'Monopoly Power and Market Power in Antitrust Law' (1987) 76 *Georgetown Law Journal* 241, 255 (offering similar comments).

⁸⁸ White (n 62) 923.

sources, the above process of defining a relevant market may provide helpful context for the requisite analysis.⁸⁹

Two additional observations about market definition are noteworthy. First, relevant markets defined for purposes of evaluating the firm's conduct may be quite different from relevant markets defined for purposes of evaluating the firm's market power. In *United States v Microsoft*, for example, Microsoft was found to have market power in the worldwide market for 'Intel-compatible PC operating systems'.⁹⁰ This would be the relevant market for the first inquiry above. But Microsoft's exclusionary conduct occurred in a broader scope of trade including 'middleware' products like Java and Netscape.⁹¹ That broader scope of trade could be seen as the relevant market for the second inquiry. In *Microsoft*, the DC Circuit rightly rejected Microsoft's argument that the targets of alleged exclusion needed to be included in the relevant market—that is, the first relevant market.⁹² The court rested this conclusion on a temporal distinction between nascent and present substitutes,⁹³ but it would have been clearer to observe that different relevant markets may be defined for different purposes. Here, the relevant market used to evaluate Microsoft's current market power simply involved a different set of competitors than the relevant market used to evaluate Microsoft's ability to maintain its market power against future erosion by middleware products.⁹⁴

Second, a remaining consideration, applicable to most single firm conduct cases but especially important for maintenance concerns, is the role that the dominant firm's size can play in explaining its incentive to exclude rivals or

⁸⁹ See Thomas G Krattenmaker and Steven C Salop, 'Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price' (1986) 96 *Yale Law Journal* 209, 255 ('[E]nough of the purchaser's actual and potential rivals must suffer the price increase so that remaining unexcluded rivals cannot or will not prevent the purchaser from exercising power over price.').

⁹⁰ *Microsoft* (n 17) 52.

⁹¹ See *ibid* 53–54 (discussing the future threat that middleware products posed for Microsoft).

⁹² *Ibid*. See also Case T-83/91 *Tetra Pak International SA v Commission* [1994] ECR II-00755, para 116 (rejecting the argument that abuse of dominance necessarily requires abuse to occur in the same market that is dominated).

⁹³ *Ibid* 54 ('Because middleware's threat is only nascent, however, no contradiction exists. Nothing in § 2 of the Sherman Act limits its prohibition to actions taken against threats that are already well-developed enough to serve as present substitutes.').

⁹⁴ See n 75.

raise their costs.⁹⁵ In many cases, the larger the dominant firm's base of existing sales, the more benefit it will extract from obstructing the competitive inroads of rivals. Intuitively, a 5 percent market-wide price reduction may equate to a far greater profit loss for the dominant firm with an 85 percent market share than it would for smaller competitors in the same market. The dominant firm may thus find it profitable to invest in forestalling future price decreases where smaller competitors would not.⁹⁶ When shares of a relevant market are used to assess the comparative incentives of firms to engage in exclusionary or cost-raising conduct, it seems intuitive that the relevant market for the second inquiry will often be the appropriate basis for share computations. This is only intuition, however, and exceptions may arise.

C. Conduct that exercises market power (sets current prices)

Finally, consider single firm conduct risking neither the creation nor the maintenance of market power but instead merely reflecting the exercise of market power. Examples of this type of conduct include a firm charging monopolistic prices or insisting upon terms of trade which could not be demanded if it did not already possess substantial market power. Under US law, this conduct falls squarely outside the reach of Section 2. Cases have long held that a monopolist commits no wrong if it obtains monopoly power without engaging in prohibited types of exclusionary conduct,⁹⁷ and recent cases have settled what little doubt may have remained about the legality of exercising monopoly power, lawfully obtained.⁹⁸ In *Pacific Bell v linkLine Communications*, the

⁹⁵ Franklin M Fisher, 'The IBM and Microsoft Cases: What's the Difference?' (2000) 90 *American Economic Review* 180, 180 ('An anticompetitive act by a single firm is one that is not profit-maximizing without the monopoly rents that it creates or maintains but is profit-maximizing with those rents included.')

⁹⁶ See Krattenmaker, Lande and Salop (n 87) 259 ('The greater the disparity in market shares between the firm seeking to raise its rivals' costs and the rivals, the greater the firm's anticipated reward for achieving a higher price for its output. Hence, such a firm would be willing to spend more in attempting to exclude rivals to gain power over price.')

⁹⁷ See *Grinnell* (n 3) 571 (distinguishing illegal monopolization from 'growth or development as a consequence of a superior product, business acumen, or historic accident'); *Alcoa* (n 9) 429 (inquiring whether a firm had 'monopolized' a market or whether 'monopoly [had] been thrust upon it').

⁹⁸ Cf *Areeda and Hovenkamp* (n 77) para 650a ('[A]s the cases have clearly held, §2 is concerned not only with remedying monopoly power to which undesirable conduct has made a substantial contribution, but also with enjoining the conduct itself.');

Trinko (n 82) 407 ('The

Supreme Court declared that ‘antitrust law does not prohibit lawfully obtained monopolies from charging monopoly prices’.⁹⁹ For the same reasons, Section 5 of the FTC Act is unlikely to prohibit the mere exercise of market power today.¹⁰⁰

Under EU law, dominant undertakings are less free to exercise their market power. Article 102 includes in its definition of abuse the act of ‘imposing unfair purchase or selling prices’. Case law supports the obvious interpretation of this language as reaching something like monopolistic pricing. As the Court of Justice held in *United Brands*, ‘charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied would be [within the scope of the abuse of imposing an unfair selling price]’.¹⁰¹ The Commission has also issued guidance identifying as illegal conduct which is ‘directly exploitative of consumers, for example charging excessively high prices’.¹⁰² At least in principle, this means that excessive pricing, or equivalent contracting practices, could be challenged as abuse of dominance under EU law.¹⁰³

In evaluating exercise-of-market-power concerns, it is hard to find any analytical need for relevant markets or market definition.¹⁰⁴ The traditional inference of substantial market power from a large share of a relevant market could still be drawn. (And, if this inference *is* to be drawn, the relevant market should be defined subject to the practices discussed above.) But, unless something like excessive pricing is to be inferred from the possession of market power alone,

mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system.’); *Ibid.* (‘To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct.’).

⁹⁹ 555 US 438, 454 (2009).

¹⁰⁰ See, eg, *Official Airline Guides, Inc. v. FTC*, 630 F.2d 920, 927–28 (2d Cir. 1980) (acknowledging, in a Section 5 case, ‘the long recognized right of trader or manufacturer ... freely to exercise his own independent discretion as to parties with whom he will deal’ and concluding that ‘even a monopolist, as long as he has no purpose to restrain competition or to enhance or expand his monopoly, and does not act coercively, retains this right’).

¹⁰¹ *United Brands* (n 21) paras 248–254.

¹⁰² Guidance on the Commission’s enforcement priorities (n 22) para 7.

¹⁰³ For a discussion of apparent legal standards for the offense of excessive pricing, see *Akman* (n 68) 194–95.

¹⁰⁴ See *Glasner & Sullivan* (n 41) 336–39 (critiquing the possibility that market definition should be legally required even where not analytically helpful).

evidence of the exercise of market power must still be produced, and whatever evidence is produced in that regard would seem better proof of the firm's possession of market power than the market definition exercise would support.¹⁰⁵ Perhaps this limits the role of market definition to the—presumably unusual—situation in which the challenged exercise of market power is not itself a maximal exercise of the firm's available market power.

V. QUESTIONS OF SIZE

While the previous discussion focused on traditional market power concerns, monopolization and abuse of dominance are not necessarily so limited. Other concerns, and other aspects of what it might mean to dominate or monopolize trade, can be usefully collected under the heading of a firm's size. These, too, may influence how relevant markets should be interpreted and defined.

A. Does size matter?

As a thought experiment, suppose that fictional firm ZedCo has a 90% share of a relevant market containing only it and one other competitor. This market was defined by the HMT with a current-price baseline and a hypothesized price increase of 5%, so if ZedCo's rival were eliminated, ZedCo would be able to raise its prices by at least 5%. Now suppose ZedCo pays a critical input supplier to refuse future deliveries to its rival, eventually driving the rival out of business. Does it matter, for monopolization or abuse of dominance purposes, that ZedCo is a single-employee business with market power limited to the isolated rural village in which it operates? Many would say yes: neither monopolization nor abuse of dominance feel like appropriate labels for the conduct of a firm this small,¹⁰⁶ even if the firm has substantial market power in its limited scope of operation.

Now change the facts. Suppose the same conduct presents only a 3% chance of driving the rival from the market and suppose further that successful exclusion of the rival would only buy ZedCo the power to raise its prices by 0.001%.

¹⁰⁵ See generally Louis Kaplow, 'Why (Ever) Define Markets?' (2010) 124 *Harvard Law Review* 437, 466 (providing a related but broader critique of market definition).

¹⁰⁶ White (n 62) 923 ('[T]here must be some de jure or de facto lower limit on a defendant's size and importance Antitrust enforcement should not care if Joe (the owner of Joe's Unique Coffee Shop) insists that his manager Nora signs a "non-compete" clause when she decides to leave and start her own eatery').

Does it matter, for monopolization or abuse of dominance purposes, that ZedCo is a tech giant with yearly revenue greater than the GDP of many countries? Again, many would say yes. Indeed, there is an economic basis for this distinction. As Landes and Posner observed long ago, ‘actual economic injury’ is a function not only of the change in price ‘but also the amount of economic activity over which the [change in price] occurs’.¹⁰⁷ Put another way, a modest market power gain could have disastrous welfare consequences when multiplied across a large enough base of transactions.

Our intuition in this thought experiment contrasts with the limited role that size plays in modern market definition practice. Relevant markets are not regularly defined by processes designed to capture economically significant scopes of trade.¹⁰⁸ Nor are they interpreted in these terms. True, consistent attention to market shares keeps the *relative* size of firms in focus. But an over-emphasis on relative size may actually obscure the role that *absolute* size—amount of economic activity affected—also plays in explaining competitive harm.

Particularly with the growing attention being paid to large tech companies, matters of size may soon become a more important part of single firm conduct cases. This is no justification for changing market definition standards—making economic significance a necessary requirement of market definition, for example. But it is excellent justification for making economic significance a regular part of the interpretation of relevant markets and how the challenged conduct would affect them.

B. Does size alone matter?

The previous discussion might undersell the role that size plays in monopolization and abuse of dominance concepts. One could take the position that *size alone* is a proper concern in single firm conduct cases. Under this view, firms too great in size are a danger themselves, separate from any market power concerns.¹⁰⁹ Markets dominated by large firms may similarly be seen as

¹⁰⁷ Landes & Posner (n 33) 953; see also Louis Kaplow, ‘On the Relevance of Market Power’ (2017) 130 Harvard Law Review 1303, 1361 n 130 (2017) (noting the potentially countervailing concern that the costs of enforcement errors may also scale with firm size).

¹⁰⁸ Sullivan (n 30) § II.A.

¹⁰⁹ For a variety of arguments in this vein, see Tim Wu, *The Curse of Bigness: Antitrust in the New Gilded Age* (2018).

deficient themselves, separate from any specific connection between concentration and power in pricing or negotiation. Competition policy could simply prefer more and smaller competitors in important areas of trade. Here, again, growing agitation over large tech companies is surfacing many of these policy positions in debates about enforcement practices and priorities.

It is not obvious that market definition is needed to apply ‘size *alone*’ considerations. But, if relevant markets are to be used in the evaluating single firm conduct under these policy goals, then new processes of market definition may be required. Markets defined by a process like the HMT, though potentially helpful in assessing the market power implications of different types of conduct, have no necessary relationship to these concerns. A firm’s control of 99% of a relevant market defined by the HMT is simply not reliable evidence that the firm is economically or politically significant, or that any other non-market-power objective would be furthered by reduced concentration in this market. Helpful relevant markets must be defined by processes matched to the concern to be addressed. For policy objectives not recently at the forefront of competition policy, there is little reason to suppose that previous market definition processes match the concern.

VI. CONCLUSION

The aspiration of this chapter is to take some initial steps toward a more coherent approach to market definition in monopolization and abuse of dominance cases. In brief, the proposed approach is to match market definition with the concerns to be addressed. If we want markets to be useful in evaluating potential wrongs, then we must define markets by processes that are sensitive to the wrongs we seek to avoid. For single firm conduct, this places the onus on the substantive law to clearly identify what specific wrongs it seeks to avoid. Greater clarity in substantive law is the most promising path to coherence in this area of market definition.