
THE COMPETITION LAW REVIEW

Volume 10 Issue 2 pp 205-239

December 2014

Post Danmark's Recoupment Test*Jay Matthew Strader**

An initial determination of dominance historically has relieved the EU Commission of any duty to prove recoupment. The argument goes that the same factors that establish dominance also prospectively demonstrate an ability to recoup. But the inquiries are not identical: Dominance represents the past and present ability to raise prices above competitive levels. Recoupment analysis involves prospectively determining whether a company will have the market power to raise prices high enough and long enough - above the level of pricing that would have existed absent predation - to recover the initial investment in below-cost pricing, which can vary in magnitude from case-to-case. By crafting a standard that the Commission, relative to US plaintiffs, more easily can satisfy, EU Institutions have sought to promote lower prices indirectly by strengthening competition. Regardless of whether that indirect route has succeeded, presuming recoupment constitutes a less effects-based approach than requiring evidence demonstrating that the lower prices now likely will harm consumers eventually. By recently requiring proof in *Post Danmark* that price-cuts produce actual or likely exclusionary effects that harm competition and 'thereby' consumers, the Court of Justice arguably grafted a recoupment element into the pre-existing EU predation test, at least for prices between incremental costs and average total costs.

I. INTRODUCTION

EU Institutions historically have measured the exclusionary effects of predatory pricing in terms of harm to competitors, harm to competition, and whether recoupment occurs, so recoupment always has counted as a relevant factor — though not a component of predation, as in the United States. Harm to competitors need not damage competition, of course, since the competitive process involves permitting competitors more effective or efficient at meeting customer needs to replace the less effective by winning profits and market share. But harm to competition must involve the weakening or elimination of rivals, since anticompetitive effects will not occur when sufficient competitive restraints exist, meaning that rivals can offer consumers better deals if a dominant company attempts to raise prices or lower quality. Harm to competitors need not damage competition enough to permit the dominant undertaking to recoup an initial investment in lower prices. Unless harm to competition reaches that level, however, whether over time or in separate markets, consumers benefit from the

* Fellow, Centre for Law, Economics & Society, University College London, JD, Vanderbilt University Law School, LL.M., London School of Economics, BA, Davidson College, Ph.D. Candidate, Faculty of Laws, UCL. I particularly would like to thank Prof. Ioannis Lianos, my primary supervisor, along with Dr. Florian Wagner-Von Papp, my secondary supervisor, for guidance throughout the Ph.D. project, including, but not limited to, recommending reliable secondary sources. I also would like to thank Prof Barry J Rodger the participants in the CLaSF Workshop hosted by Bird & Bird LLP in London on 1 May 2014.

lower prices employed to exclude, and predation cannot increase the market power of the dominant undertaking.

EU Institutions historically have not required the Commission to prove a likelihood of recoupment before striking-down below-cost pricing because the same factors that establish dominance — high and sustained market shares and profit margins, predominately inelastic demand for the undertaking's products,¹ product differentiation, and the existence of high entry barriers — also support the ability to recoup. But the inquiries are not necessarily identical. Dominance signifies historic market power: the past and present ability to raise prices above competitive levels. Recoupment analysis involves prospectively determining whether a company will have the market power to raise prices high enough and long enough above competitive levels to recover an initial investment in below-cost pricing.

While a recoupment presumption generally may hold if the Commission accurately identifies significant dominance, and while U.S. federal appellate courts mostly have assessed the probability of recoupment by examining the strength of the defendant's market power,² case law from the U.S. Court of Appeals for the Fifth Circuit suggests that the presumption will not always prove accurate.³

Although the EU recoupment presumption unlikely overextends liability for price-cuts in the majority of predation cases, a material number of cases could arise where the degree of market power required to recoup might exceed the market power initially found by the court or competition tribunal. This risk is greater in the EU because, without an attempted monopolization doctrine, the Commission has compensated by finding dominance at lower market share levels than U.S. Institutions, even below 50%.⁴ The recoupment presumption further might render meaningless the offense of predatory pricing in those new economy industries where goods and services are 'free,'⁵

¹ See Posner, R.A., *Antitrust Law*, 90, Chicago, The University of Chicago Press, 2d. ed., 2001.

² See, e.g., *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, 881 F.2d 1396, 1403 (7th Cir. 1989) (Easterbrook, J.) ('Market structure, [in addition to persistent entry and expansion], made recoupment impossible ... Rose Acre's 1% share on a national basis hardly gave it the power to raise price.'). *Am. Academic Suppliers, Inc. v. Beckley-Cardy, Inc.*, 922 F.2d 1317, 1319 (7th Cir. 1991) (Posner, J.) ('If [the defendant] does not have [market] power, he will not be able to recoup the losses sustained in pricing below cost by later raising his price above the competitive level.').

³ See *Stearns Airport Equip. Co., Inc. v. FMC Corp.*, 170 F.3d 518, 528 & n.9 (5th Cir. 1999) (Garwood, J.) (Notwithstanding a defendant with 'overwhelming market share,' the Fifth Circuit stated that, though relevant, a large market share 'does not, standing alone, allow a presumption that [recoupment] can occur.'). *id.* at 529 ('If [defendant's] pricing cannot drive [plaintiff] out of the market, then it will never have a chance to charge supra-competitive prices, let alone sustain those levels [and recoup].'); *Taylor Publ'g Co. v. Jostens, Inc.*, 216 F.3d 465, 478 (5th Cir. 2000) (Garza, J.) (In attempted monopolization case, meaning that the defendant had only between 40% and 50% of the relevant market, the Court dismissed the predatory pricing claim because plaintiff 'never lost more than two-fifths of one-percent of its customers to [defendant's] below-cost pricing in any one year,' thus defendant could not have recouped.); see also *Stitt Spark Plug Co. v. Champion Spark Plug Co.*, 840 F.2d 1253, 1256 (5th Cir. 1988) (Higginbotham, J.) (dismissing predation claim because plaintiff never proved that anticompetitive effect or recoupment 'depended upon the absence of [plaintiff] as a competitor').

⁴ See, e.g., Gal, M.S. & Rubinfeld, D.L., 'The Hidden Costs of Free Goods: Implications for Antitrust Enforcement' (2014), 44, <http://www.eale.org/conference/Aix-Marseille2014/paper/view/1030/309>.

⁵ See *id.* at 38.

like those offered by Google and Facebook, whose relevant markets feature economies of scale in consumption or network effects. In markets for source code or software, as well, marginal costs trend toward zero.⁶ Practically identifying the essence of predatory pricing in such industries might focus on assessing the likelihood of recoupment rather than comparing prices to costs. Such an analysis nevertheless would entail working-out price-cost ratios in those markets, which must exist, where customers are paying actual prices.⁷

To take another example where a recoupment presumption may prove faulty, perhaps the ‘but-for’ world of no predation involved the entry of a particularly robust competitor and the possibility of duopoly pricing, which would require splitting monopoly profits two-ways.⁸ For the predation to succeed, the dominant undertaking must severely reduce prices or otherwise predate for an extended period, and actually eliminate the entrant — which means that, to recoup, the dominant undertaking will likely have to price at a level above even its pre-entry monopoly price. Yet the prospect of maintaining all of a smaller pot of monopoly profits in the relevant market instead of splitting a larger pot two ways still may motivate the initial losses. If the dominant undertaking succeeds in eliminating the entrant but never fully recoups because of apprehension that a price sufficient for recoupment might draw the excluded rival back into the market, then punishing the dominant undertaking for predation overextends liability, since the ‘but-for’ duopoly pricing would have exceeded post predation prices. The ‘predation’ lowered overall prices to consumers.

The historical persistence of the recoupment presumption⁹ demonstrates a stronger European commitment to the Neoclassical Price Theory (NPT)¹⁰ concept of competition. The presence of viable competitors separates the preferred model of perfect competition from the lower welfare model of monopoly: The competition between rivals produces the efficiency sought in perfectly competitive markets. By crafting a standard that the Commission, relative to U.S. plaintiffs, more easily can satisfy — by historically not requiring proof of recoupment and by allowing predation to occur above average variable cost (AVC) — EU courts have sought to promote lower prices indirectly by strengthening competition. Regardless of whether that indirect route has succeeded, presuming recoupment constitutes a less effects-based

⁶ Posner, *supra* n.1 at 245-46, 255-56. Thanks to Dr. Wagner-Von Papp for reminding me of this issue.

⁷ See Gal & Rubinfeld, *supra* n.4 at 40.

⁸ For a discussion of the ‘but-for’ liability test in the tying context, see Elhauge, E., ‘Tying, Bundled Discounts, & the Death of the Single Monopoly Profit Theory’ (2009) 123 Harv. L.R. 397.

⁹ The presumption has not escaped criticism. See, e.g., Korah, V., *An Introductory Guide to EC Competition Law & Practice*, 195-197, 9th ed., Portland, Hart Publishing, 2007 (discussed in Nazzini, R., *The Foundations of European Union Competition Law: The Objective & Principles of Article 102*, 203, Oxford, Oxford University Press, 2011).

¹⁰ For ‘price theory,’ see Posner, R.A., ‘The Chicago School of Antitrust Analysis,’ (1979) 127 U. Pa. L. Rev. 925, 928. For the original use of the term ‘neoclassical price theory,’ see Lianos, I. & Mateus, A., ‘Antitrust In the New U.S. Administration: A Transatlantic View,’ Release Two, The GCP Online Magazine for Global Competition Policy, Jan. 2009, at 33-34, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1399693. For a definition, see Strader, J.M., ‘The Consequences Of Neoclassical Price Theory For U.S. Predatory Pricing Law’ (University College London Centre For Law, Economics & Society, Working Paper No. 7-2012) at 9-15, <http://www.ucl.ac.uk/cles/research-paper-series/research-papers/cles-7-2012>.

approach than requiring evidence demonstrating that price-cuts will likely reverse and eventually produce higher overall prices. Indeed, predation mostly cannot produce anticompetitive effects — and will not harm consumers in the target market — unless the dominant company later raises prices and thereby recovers the original ‘gift’ to consumers.¹¹ Price-cuts without recoupment benefit consumers, negating the possibility of anticompetitive effects. By recently requiring proof in *Post Danmark* that price-cuts above incremental costs but below average total costs produce actual or likely anticompetitive effects, therefore, the Court of Justice, without ever mentioning the term, arguably mandated that the Commission establish the existence or likelihood of recoupment.¹²

The article proceeds initially by examining what, precisely, constitutes the anticompetitive effects of predation, see *infra* Part II. Economists and EU Institutions (the Commission & Courts) occasionally have defined anticompetitive effects exclusively by the inefficiency produced from below-cost pricing. See *infra* Part II(A). To demonstrate the need for a recoupment element, I consider the drawbacks of employing only cost tests to evaluate predatory pricing. See *infra* Part II(B). I then argue that, by focusing on price levels, recoupment analysis aims to serve consumer interests more directly than cost tests, which promote static efficiency. See *infra* Part II(C). The article turns to whether predation can increase market power without recoupment, see *infra* Part II(D), before highlighting how EU Institutions generally had implemented a sliding scale to evaluate effects prior to *Post Danmark*, see *infra* Part II(E). In the next section, I critically assess whether dominance ensures recoupment, see *infra* Part III, first by briefly considering the legal and theoretical support for presuming recoupment, see *infra* Part III(A), and second by responding to adherents of that approach, including those interested in expanding non-price measures of effects, see *infra* Part III(B). I finally analyse the facts and reasoning of *Post Danmark* to demonstrate the legal and economic coherence of measuring the anticompetitive effects of predation in terms of recoupment, see *infra* Part IV, before concluding in Part V.

II. EFFECTS OF PREDATORY PRICING

Neoclassical Price Theory (NPT) heavily has influenced effects analysis in the predation context. NPT defines the anticompetitive effects for which competition authorities search in dominance cases. While NPT concepts such as dominance, cost tests, and the probability of recoupment have assisted judges and competition authorities in predicting competitive effects, NPT further has defined the anticompetitive consequences of predation — namely the reduced output, lower productive and allocative efficiency, and higher prices depicted in monopoly models. For predatory pricing, the timing of intervention separates whether competition authorities rely on decision-making factors designed to predict competitive effects or instead search for concrete evidence of recoupment. Professor Wolfgang Wurmnest has distinguished between the two inquiries by calling the first a ‘structural recoupment test,’ which

¹¹ *A.A. Poultry Farms*, 881 F.2d at 1401 (discussed extensively in: Leslie, *supra* n.3, 1709).

¹² Case C-209/10 *Post Danmark A/S v. Konkurrenceradet, Forbruger-Kontakt a-s*, ECLI:EU:C:2012:172, 44.

assesses the likelihood of predation succeeding by examining market conditions, ‘such as the strong market position of the predator vis-à-vis its prey, excess capacity, high barriers to entry and the [fluctuation] of market shares during the predation campaign’.¹³ The alternative analysis focuses on an accounting of the predatory pricing act, which involves tallying or quantifying losses and actual or prospective gains, meaning the initial lower prices against subsequent higher prices. Recoupment occurs only when gains exceed losses.¹⁴ Monopolization law generally aims to prevent and remedy anticompetitive effects perpetrated by dominant companies. Predation doctrine ultimately seeks to prevent and remedy higher overall prices initiated by price-cuts,¹⁵ but intermediately it seeks to prevent and remedy price-cuts that fortify a dominant position by increasing entry barriers, *or* by independently eliminating or deterring rivals who act to constrain price-increases above existing supra-competitive levels. The Commission views this intermediate objective as preventing anti-competitive foreclosure. Judges and competition authorities can measure effects by various methods. If they aim to promote consumer welfare,¹⁶ however, judges and competition authorities will measure effects by whether the price-cuts ultimately result in higher prices.

II(A). Effects Measured Exclusively by the Inefficiency of Below-Cost Price-Cuts

Competitive markets produce efficiency in the sense that:

- enough consumers willing to pay the relevant production costs purchase the product, allowing the market to operate at minimum efficient scale;
- no undertaking can raise price above production costs without losing market share;
- undertakings also will lose market share if they do not operate according to industry best practices;
- society could not reallocate the resources required to produce the relevant product more effectively or cheaply; and
- only technological breakthroughs or enhanced productivity, not additional competition as such, could lower prices in the relevant market.

Monopolized markets produce inefficiency because:

¹³ Wurmnest, W., ‘Predatory Pricing: From Price/Cost-Comparisons to Post-Chicago Thinking’, in Basedow, J. & Wurmnest, W. (eds), *Structure & Effects in EU Competition Law*, 97, 109-110, The Netherlands, Wolters Kluwer, 2011. For a classic discussion of market structure as a method of determining recoupment see: Joskow, P.L. & Klevorick, A.K., ‘A Framework for Analyzing Predatory Pricing Policy’ (1979) 89 Yale L.J. 213.

¹⁴ *Id.* at 110. See also Areeda, P.E. & Hovenkamp, H. *Antitrust Law* (3A) 726d5, 3d ed, The Netherlands, Aspen Publishing, 2008, drawing a similar distinction.

¹⁵ See, e.g., A.82 Guidance Paper (2009/C 45/02) at 19 (discussing protecting consumer welfare in terms of avoiding ‘higher price levels than would have otherwise prevailed’).

¹⁶ This is not a given. See, e.g., Nazzini, *supra* n.9 at 4 (advocating the objective of long-term social welfare).

- dominant undertakings can raise price and reduce output without losing market share;
- some willing to pay the costs of efficient production no longer can afford to purchase the product;
- society could reallocate the resources required for production more effectively or cheaply; and
- additional competition could lower prices in the relevant market.

Monopolized markets, characterized by high entry barriers and other restraints on the productive capabilities of rivals, also can reduce the dominant undertaking's incentive to lower production costs and to innovate, since inefficient behaviour still generates satisfactory profits; X-inefficiency results.¹⁷ But market power does not always necessitate government action, since the act of operating efficiently itself or productive investment — not anticompetitive behaviour — may have created high levels of concentration and high profit-rates in the first instance.¹⁸

The difference in efficiency between competitive markets and monopolized markets, as depicted in NPT models, justifies government interference in the decision-making of large, successful companies. In traditional markets, only undertakings with significant market power could predate successfully. In new economy markets, an undertaking theoretically could employ predation to acquire a monopoly. But economies of scale in consumption, low marginal costs and low incremental costs to ramp-up production, along with intellectual property or other barriers to replicating the relevant platform, must characterize market production.¹⁹ In the early stages of a market, if any alternative platforms exist, they often will be employing the same strategy, so that if a rival goes on to achieve dominance, other factors than predation often will explain its success. Or competitors will not appear in the relevant market until after the undertaking has secured a dominant position. For at least these reasons, U.S. federal appellate courts and EU courts have considered predation exclusively in traditional markets, where dominance exists.

Predatory pricing has concerned competition authorities because the act itself produces inefficiency. The loss on each unit of output represents the inefficiency of below-cost pricing: The undertaking could operate more efficiently by producing another product that generates revenues at least equal to the costs of production. After eliminating rivals, the resulting profit on each unit of output represents the inefficiency of above-cost pricing: consumers would benefit if the market operated at the level of production achieved in perfect competition. That way, they would not consume too much, and then too little, of the relevant product, measured by their willingness to pay its production costs, and thus measured in terms of efficiency. Combined with other

¹⁷ See Monti, G., *EC Competition Law*, 56, Cambridge, Cambridge University Press, 2007 (citing Leibenstein, H., 'Allocative Efficiency v. "X-Efficiency"' (1966) 56 *American Economic Review* 392); see *id.* at 59.

¹⁸ See *id.* at 63.

¹⁹ Posner, *supra* n.1 at 246-47, 255-56.

components of market power, a successful predation scheme prevents rivals, and relieves the dominant undertaking, from producing the additional units necessary for market equilibrium. Consumer demand for those extra units at cost means that greater production would enhance efficiency in the relevant market.

Predatory pricing can eliminate less, equally, and more efficient competitors. Because market actors operate primarily based on the signals that relevant prices send, according to NPT, predation effectively can disrupt efficient competition. The predation practiced by *AKZO* proved particularly inefficient, since *AKZO*'s below-AVC pricing eliminated a more efficient competitor that, despite lower production costs than *AKZO*,²⁰ still could not compete with *AKZO*'s below-cost prices. Another example of predation eliminating more efficient rivals occurs when, despite having an overall lower cost curve than the incumbent, perhaps due to historic legal or social commitments that the incumbent owes to its employees, the rival still produces at a higher cost per unit of output. Predation can prevent the rival from achieving the scale necessary to meet or under-cut the incumbent's prices.²¹

Detecting predation poses material challenges, since the first stage of the practice, the price-cut, also constitutes the primary means by which most undertakings compete. Competition authorities rightfully worry that aggressive enforcement of predatory pricing generally could deter dominant undertakings from cutting prices. To minimize that risk while also attempting to prevent anti-competitive price-cuts, the Commission and Court of Justice have employed the as-efficient competitor test. The test operates by identifying a proxy or benchmark for efficiency, generally the costs of the dominant undertaking. Liability attaches to price-cuts below that benchmark because dominant undertakings generally have no rational reason to price inefficiently low but to exclude rivals. All price-cuts above cost, which also represent inefficient pricing, qualify for safe harbour treatment because such cuts theoretically cannot exclude an as-efficient competitor,²² 'a hypothetical competitor having the same costs as the dominant company'.²³ Note that the as-efficient competitor test is a basic cost-test, in that '[f]oreclosure of an as efficient competitor can in general only result if the dominant company prices below its own costs.'²⁴

Absent competition — an absence reinforced by price-cuts down to average variable cost (AVC) — a dominant firm anyway would not price at AVC but significantly above average total cost (ATC) or long-run average incremental cost (LRAIC).²⁵ In terms of static welfare accounting, if prices regularly far exceed ATC or LRAIC, then additional

²⁰ *ECS/AKZO* [1985] OJ L374/1, 25.

²¹ See Mateus, A.M., 'Predatory Pricing: A Proposed Structured Rule of Reason' (22 Mar. 2010) at 14, available at: <http://ssrn.com/abstract=1576434>.

²² See Art 82 Guidance Paper (2009/C 45/02), 23-27; see also Case C-209/10 *Post Danmark A/S v. Konkurrenceradet, Forbruger-Kontakt a-s*, ECLI:EU:C:2012:172, ¶ 25.

²³ See DG Competition Discussion Paper on the Application of Article 82 of the Treaty to Exclusionary Abuses (Dec. 2005), 63 (Staff Discussion Paper), available at: www.ec.europa.eu/competition/antitrust/art82/index.html.

²⁴ See *id.*

²⁵ See *id.* at 102.

competition very well could generate greater market-wide efficiency or lower market-wide prices closer to the ATC or LRAIC of the dominant undertaking, the only available long-term measure of efficiency. By deduction, permitting dominant undertakings to eliminate that additional competition, at least by lowering prices below their own long-term measure of efficiency, ultimately should permit a return to inefficient pricing high above ATC or LRAIC.²⁶

The Commission has expressed a willingness to identify anti-competitive effects exclusively from the inefficiency associated with pricing below-cost, regardless of whether the dominant undertaking ultimately recouped. In *Deutsche Post* the Commission determined that anti-competitive effects existed because the below-cost pricing inhibited 'economically efficient alternatives' that would have covered cost. By investing in below-cost pricing of mail-order parcel services, Deutsche Post wasted scarce resources — specifically the subsidization from profits-earned in the government-sponsored monopolized market for regular mail-delivery. Thus regular mail customers 'were forced to finance unnecessary wastage of scarce resources.'²⁷ The Commission here is focused on protecting the price-mechanism as a means to promote competition because the price-mechanism efficiently allocates resources. Subsidization from the monopolized market obstructed the proper functioning of the price-mechanism in that the below-cost price inaccurately signalled to competitors and suppliers a level of production actually characterized by inefficiency. Without that subsidization, higher prices would have ensured fewer resources, including monopoly rents, wasted on oversupplying mail-order parcel services, resources better-suited to alternative productive uses, including by Deutsche Post consumers and shareholders. Consumers of regular mail services might have paid lower prices, such that the subsidization scheme could have prevented additional consumption in other markets. Deutsche Post also could have returned a portion of higher revenues to shareholders. At a non-predatory price level in the mail order parcel services market, resources of competitors otherwise driven to less-productive activities could have remained in that market to compete more robustly with Deutsche Post. Inefficiency also resulted from customers in the mail-order parcel services market, who were not even willing to pay the costs of production, diverting resources away from products for which they were willing to pay production costs.²⁸

Perhaps courts and competition authorities intuitively exercise more vigilance over potential exclusionary practices perpetrated by companies that hold government-sponsored monopolies, and for good reason:²⁹ The price mechanism already fails to

²⁶ For a defence of LRAIC as the appropriate cost benchmark, see Posner, *supra* n.1 at 215-216.

²⁷ Case COMP/35.141 – *Deutsche Post AG* Commission Decision of 20 March 2001 (2001/354/EC), 37-37 (found in: Lianos, I, 'Is The Availability of "Appropriate" Remedies A Limit To Competition Law Liability Under Article 102 TFEU? The Mischiefs of "Discretionary Remedialism" In Competition Law,' in Etro, F. & Kokkoris, I. (eds.), *Competition Law & The Enforcement of Article 102*, 165, 187-202, Oxford, Oxford University Press, 2010)..

²⁸ See generally Leslie, *supra* n.11.

²⁹ This idea occurred to me in September 2012 while attending the conference, 'Recent Developments in the Enforcement of Article 102,' sponsored by Stockholm University and Professor Ulf Bernitz.

operate as it would under competitive market conditions — under the normal interplay of demand and supply forces. Indeed, governments often heavily regulate the prices-set in such markets, ensuring a healthy rate of return protected from competition. Allowing dominant undertakings to funnel synthetic profits to unregulated markets risks importing inefficiency and distorting competition, whether or not recoupment follows. Yet if recoupment does not follow, then consumers in the mail-order parcel services market benefit from lower prices. An executive institution such as the EU Commission has the authority to weigh benefits and detriments to consumers over time in different markets, and to take a side. Here regular mail service customers likely far outnumber mail-order parcel service customers. U.S. antitrust authorities generally would not intervene if recoupment does not follow the short-term inefficiency generated by below-cost prices because of consumer gain in the target market, though recoupment in this instance may have occurred at least partially in the regular mail service market. Deutsche Post may have been attempting to deter private package companies from competing more actively there. A predation standard lacking a recoupment element, as previously existed in the EU, more readily permits competition authorities to remedy anti-competitive effects measured exclusively by short-term inefficiency. If recoupment occurs, however, higher prices produce more durable inefficiency.

II(B). Weaknesses of Cost Tests

Cost tests, whether anchored at average variable cost (AVC), incremental cost, or average total cost (ATC), exhibit notable weaknesses. First, when significant market power or dominance exists, giving cost tests primacy in detecting predatory pricing could perpetuate supra-competitive pricing. When a dominant undertaking has maintained high market shares and has earned substantial profits over an extended period, and when high entry barriers, product differentiation, or intellectual property, for instance, has prevented rivals or potential rivals from winning market share or compressing the dominant undertaking's profit margins, market competition fails to constrain the dominant undertaking adequately. If the dominant undertaking then drastically cuts prices and thus prevents entry or rival expansion,³⁰ then the most important conclusion to draw is that the dominant undertaking was pricing excessively prior to entry or rival expansion,³¹ and that inadequate competition previously existed in the relevant market. Concluding that the price-cuts temporarily represented more efficient pricing because they remained above variable costs seems beside the point, at least on economic grounds. The relatively prompt exit or material weakening of competitors in such circumstances likely signals subsequent price hikes and the prospect of recoupment.³² Whether the initial price-cuts fell below a relevant cost

³⁰ See International Competition Network, Unilateral Conduct Working Group, 'Predatory Pricing Analysis Pursuant to Unilateral Conduct Laws' (Marrakech 2014) Report to the ICN Annual Conference, at 5 2, available at: http://www.icnmarrakech2014.ma/pdf/ICN_Recommended_Practices.pdf ('ICN Report').

³¹ See generally Ezrachi, A. & Gilo, D., 'The Darker Side of the Moon: Assessment of Excessive Pricing and Proposal for a Post-entry Price-cut Benchmark', in Ezrachi, A. (ed), *Article 82 EC: Reflections on its Recent Evolution*, 169, 180, Portland, Hart Publishing, 2009.

³² See ICN Report, *supra* n.30 at 9, 2, Comment 2.

measure does not fully indicate whether the predation scheme likely would prevent lower equilibrium pricing in the relevant market, and thus whether it likely would harm consumer welfare. Such pricing power may constitute a just reward for investments that advanced technological progress or that otherwise enhanced societal welfare, but a solitary investigation into price-cost margins does not establish that defence.

As another weakness, cost tests do not necessarily approximate efficient production levels. Cost tests do not attempt to identify the efficient level of pricing in any given market. That efficient, hypothetical pricing level occurs only in perfect competition where the market price equals the marginal cost of all undertakings operating in the market. Because predation has concerned competition authorities only when employed by dominant undertakings, the relevant market more closely resembles the monopoly model. An efficient monopolist will price along the demand curve above where marginal revenue equals marginal cost, how high above depending on the elasticity of demand. Cost tests purport to allow dominant undertakings to lower price down to the efficient level, where production would occur under competitive conditions. The inability of competitors to restrain dominant undertakings, however, may inflate the dominant undertaking's cost curves above the level where even an efficient monopolist would operate.³³ Such inefficiency raises prices, lowers market-wide output, increases deadweight loss, and lowers both producer and consumer surplus.

Neither NPT nor microeconomics more generally has developed sufficient tools for determining when such cost inflation occurs. Even the Lerner index — which measures an undertaking's market power if sufficient information exists (which it rarely does) concerning the undertaking's marginal costs — does not indicate whether inefficiency has inflated the marginal cost of the undertaking.³⁴ Only the entry of a more efficient competitor, able to satisfy consumer demand at a lower cost than the monopolist, can demonstrate such inefficiency. Strict cost tests, particularly the AVC benchmark, may permit the dominant undertaking to prevent or deter such entry even if the dominant undertaking already has earned bountiful returns for investment or innovation. Significant entry barriers mean that entrants must overcome learning costs and often quickly achieve economies of scale or scope to match a drastic price-cut by the dominant undertaking while avoiding bankruptcy. Rigid cost tests add an additional hurdle to competition. Promoting open and contestable markets³⁵ and maximizing the prospects for efficient production over time, while still allowing healthy rates of return, would involve employing more flexible cost benchmarks. By counting at least a portion of fixed costs when scrutinizing predation claims, judges and competition authorities create better opportunities for entrants to employ ingenuity to lower costs and to serve consumers' interests better. They may fail or duplicate existing fixed costs, which produces allocative inefficiency. But monopolists will respond by competing more

³³ See Monti, *supra* n.17 at 219.

³⁴ Lerner, A.P., 'The Concept of Monopoly & the Measurement of Monopoly Power' (1934) 1 *The Review of Economic Studies* 157 (discussed in Monti, *supra* n.12 at 130-31). I accessed a short summary of the Lerner Index on Wikipedia, available at: http://en.wikipedia.org/wiki/Lerner_index.

³⁵ *Cf.* Lianos & Mateus, *supra* n.10 at 32-33 (arguing that EU monopolization law targets consumer sovereignty).

vigorously to eliminate the upstarts, thus minimizing the prospects for inflated cost curves and productive inefficiency.

On the other hand, if the absence of competitive constraints has inflated the dominant undertaking's AVC or ATC, the higher cost curves raise the floor below which the monopolist cannot lower price. The inflated cost floor should facilitate entry compared to the floor set by a more efficient monopolist that could lower price even further while still complying with the relevant cost test. The symmetry of this relationship undermines the sagacity of hypothetically projecting the costs of a more efficient monopolist, even if feasible, because entrants would have even greater difficulty establishing predation given the resulting benchmark.

As a third weakness, the inevitable existence of consumer inertia, cultivated by switching costs, counts against cost tests. Consumers exhibit brand loyalty to favoured products. To enhance brand loyalty, companies invest vast resources in advertising and customer loyalty schemes, in addition to differentiating their products. Such efforts may multiply the effect of consumer inertia to an extent greater than they contribute to the higher costs of a dominant undertaking. Higher costs, of course, facilitate entry. Entrants also invest tremendous sums in advertising to lower the information costs of switching products. The prevalence of advertising, customer loyalty schemes, and differentiation supports their profitability. Switching costs further encompass the lower utility that consumers risk by trying new products, and the replacement costs that consumers frequently incur if the new product disappoints. For certain non-durable goods such as various categories of non-prescription medicines,³⁶ the switching costs may not amount to much. For durable goods that require greater investment and a longer period of consumption, such as personal computers and automobiles, or for goods that involve health and safety that raise the potential loss of the switch — such as airline tickets, food products, or certain prescription drugs — switching costs can amount to more. In short, switching costs bestow on dominant undertakings an extra 'advantage at keeping customers'.³⁷

That advantage prevents challengers from securing market share simply by charging the same price as the dominant undertaking when entering a market. The challenger must charge a lower price to compensate the customer for the switching costs associated with trying a new product: '[A]t a minimum, if the entrant charges the same price as the monopoly it should expect very little if any business (even though in the standard model, it would get half the market).'³⁸ Switching costs increase the efficiency — even above that of the monopolist — at which a challenger must operate to win market share, and thus they lower the actual price that the challenger must charge to enter a market. Accounting for switching costs, the as-efficient competitor test actually does *not* engender as-efficient competition at all, since a challenger will enter a market or expand

³⁶ See <http://smallbusiness.chron.com/difference-between-durable-goods-nondurable-goods-34928.html>.

³⁷ Edlin, A., 'Predatory Pricing', in Elhauge, E. (ed), *Research Handbook on the Economics of Antitrust Law*, 144, 153, Cheltenham, Edward Elgar, 2012.

³⁸ Id.; see also Nazzini, *supra* n.9 at 351.

production only when the market price either exceeds or shortly will exceed its ATC.³⁹ The as-efficient competitor test thus permits a dominant undertaking to lower price and exclude both as-efficient and more-efficient rivals, the extent to which partly depends on the size of switching costs. To demonstrate, if the incumbent can lower price down to AVC, the challenger will enter only if the incumbent's AVC exceeds its own ATC⁴⁰ — a potentially prohibitive obstacle in markets characterized by high fixed costs, precisely the markets most susceptible to monopolization. The fact that a challenger has not had an opportunity to overcome learning costs or the economies of scale and scope characteristic of monopolized markets further contributes to the often prohibitive burden of beating prices near the incumbent's AVC.

These three weaknesses — the fact that cost tests may sustain supra-competitive pricing given significant market power, the questionable ability of cost tests to promote market-wide efficient pricing in all important instances, and the failure of cost tests to account for switching costs — raise serious questions (to varying degrees) as to whether EU monopolization law should have relied on cost tests so heavily to detect predatory pricing.

II(C). Efficiency, Consumer Welfare, or Both?

If anticompetitive effects arise only when prices fall below cost, then efficiency merges into effects, and a total welfare standard arguably applies to pricing practices. That standard, a product of the Neoclassical Price Theory (NPT) focus on efficiency, does not count consumer welfare or consumer surplus as the only relevant consideration in determining the existence of anticompetitive effects. Rather, a total welfare standard balances gains and losses to both consumers and producers. A practice is pro-competitive if total gains outweigh total losses, including if gains to producers exceed losses to consumers, such as when a practice yields productive and allocative efficiencies in addition to higher prices. Competition authorities employ cost tests because they identify inefficiently low prices; cost tests implicitly represent the concept that inefficiently high prices cannot harm consumers and thus produce anticompetitive effects. Cost tests can favour dominant undertakings when plaintiffs have difficulty categorizing and calculating costs (assuming adequate cost evidence exists), and by usually providing dominant undertakings great scope to lower price without violating the standard. Yet dominant undertakings cannot benefit from predation and inflict harm on consumers, even after violating a cost test, unless recoupment occurs. Even if EU courts focus on foreclosure and protecting against practices that strengthen or maintain a dominant position,⁴¹ below-cost pricing without recoupment weakens dominant undertakings. Recoupment must follow to strengthen or maintain a dominant position.

³⁹ See generally Mateus, *supra* n.21 at 18; see also Rouseva, E., *Rethinking Exclusionary Abuses in EU Competition Law*, 138, Portland, Hart Publishing, 2010.

⁴⁰ Mateus, *supra* n.21 at 16-17.

⁴¹ For a clear articulation of this principle, see Nazzini, *supra* n.9 at 207.

A consumer welfare standard defines anticompetitive effects differently.⁴² The NPT version of consumer welfare isolates consumer surplus, or the difference between the price that consumers pay for a product and their reservation price, or the highest price that they would have paid for that product. Assuming constant tastes, lower prices expand that difference and thus increase consumer surplus. Notice how NPT partially collapses the other measures of consumer welfare used by the Commission, greater output, choice, quality, or innovation,⁴³ into one variable, price. Greater output will lower price. If consumers want greater choice, quality, or innovation, they should be willing to pay higher prices, which will attract entrants eager to compete on those product characteristics. Further notice how consumer surplus can increase even if prices rise, assuming consumers are willing to pay even higher prices. Quality enhancements potentially have this effect. According to NPT, increases in consumer welfare do not always accompany price-cuts, if consumers are willing to spend less on a product. Assuming constant tastes in choice or quality, however, price-cuts more likely enhance consumer surplus and thus consumer welfare.

The differences between a total welfare and a consumer welfare standard could influence the merits of which predatory pricing test to select. The ultimate predation test that a competition authority adopts will reflect its priorities in enforcing monopolization law. A cost test examines relative efficiency — whether a competitor can match the low costs of a dominant undertaking, which indicates whether society would gain by applying the competitor’s resources to other productive uses — and thus seeks to promote productive and allocative efficiency. A recoupment test focuses on whether prices rise or fall over time — whether an initial price-cut introduces lower overall prices or whether it simply excludes so that higher prices can follow — and thus more approximately aims to maximize consumer surplus. Higher ultimate prices also can generate greater productive and allocative inefficiency. Productive and allocative efficiency benefit consumers indirectly: lower costs enable, but do not compel — unlike competitive conditions — an undertaking to lower prices. And economy-wide prices fall when suppliers allocate resources to their lowest-cost uses.⁴⁴ Consumers in the market subject to predation benefit more directly when prices remain low — when the dominant undertaking fails to recoup. NPT supports promoting all three objectives. But advancing allocative and productive efficiency at the expense of consumer surplus seems peculiar given that the Commission has stated that it will enforce EU competition law for the benefit of consumer welfare.⁴⁵ Greater efficiency raises the

⁴² For a discussion of how a consumer welfare standard relative to an efficiency standard might affect tying and bundling analysis, see Economides, N. & Lianos, I., ‘The Elusive Antitrust Standard on Bundling in Europe and in the United States in the Aftermath of the Microsoft Cases’ (2009) 76 (2) *Antitrust Law Journal* 486, 542.

⁴³ Art 82 Guidance Paper (2009/C 45/02), 11, 19.

⁴⁴ Even if predation eliminated a more efficient rival, consumers do not experience higher prices unless recoupment occurs — unless the rival’s elimination allows the dominant undertaking to increase market-wide prices long enough and high enough above the level that would have existed absent predation. See *infra* Part II.D; but see Nazzini, *supra* n.9 at 204 (discussing the loss of productive efficiency from a dominant undertaking eliminating a more efficient rival). Consumers are indifferent to whether a price reflects lower production costs or a greater relative deadweight loss, so long as they pay lower prices.

⁴⁵ Art 82 Guidance Paper (2009/C 45/02), 5, 19.

prospect of lower prices; a recoupment test verifies them given the available economic evidence. Adding a recoupment element to the as-efficient competitor test would increase the importance of consumer surplus and lower overall prices when evaluating predation, and thereby create a test that more immediately protected consumer interests.

II(D). Predation without Recoupment Cannot Confer Market Power

In a relatively recent article arguing that the U.S. Supreme Court should eliminate the recoupment requirement when evaluating predatory pricing claims, Professor Christopher Leslie asserted that ‘a predatory firm could illegally monopolize the market without recouping its losses,’ thus ‘[t]he correct focus for section 2 ... is market domination, not recoupment.’⁴⁶ To support the claim, Professor Leslie relies on Professors Areeda and Hovenkamp for the proposition that ‘post-predation prices can be significantly supra-competitive, thereby injuring consumers, and yet be insufficient in size or duration to provide full recoupment for the defendant’s investment in predation.’⁴⁷ Regardless of whether previous consumers paid lower prices, Professor Leslie continues, ‘current consumers paying prices above cost suffer an antitrust injury even if recoupment never occurs.’⁴⁸

These arguments ignore opportunity costs and market conditions in the ‘but-for’ world,⁴⁹ misinterpret market power, and assume that judges and competition authorities can impose prices at the dominant undertaking’s marginal cost. The higher the market power of an undertaking prior to predation, the more exclusionary the potential of the predatory price, since the lower the undertaking can reduce prices before reaching the cost floor. Yet the lower the price-cut, the higher that prices must rise to justify the practice. For an undertaking operating outside of the distinctive new economy markets, discussed earlier, to employ a predatory pricing scheme that jeopardizes consumer welfare, it has to have market power, or the ability to price above marginal cost. Otherwise the undertaking will have no means to raise prices above the competitive level after weakening or eliminating the target of predation, and it will incur losses without securing any offsetting gains. Entry barriers must exist in the relevant market. Sceptics might retort that the predation itself might constitute a behavioural entry barrier,⁵⁰ and indeed it can, but unless the predating undertaking has spare capacity, significant financial reserves, and/or the ability to lower prices sharply — meaning unless the predating undertaking already has significant market power — the threat to predate will not deter potential entrants from entering the relevant market. Improbable threats of predation cannot operate as behavioural entry barriers.⁵¹ After accounting for

⁴⁶ See Leslie, *supra* n.11 at 1748.

⁴⁷ See *id.* at 1742 (quoting Areeda & Hovenkamp, *supra* n.14, 726 at 77).

⁴⁸ See *id.*

⁴⁹ Cf. Elhauge, *supra* n.8.

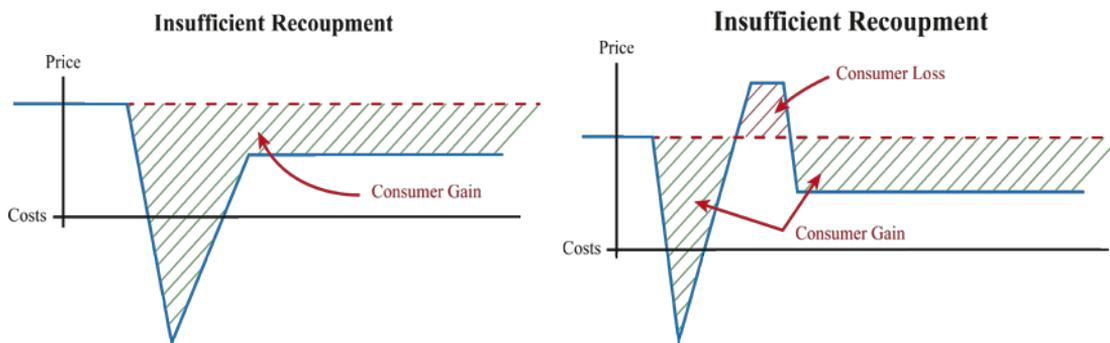
⁵⁰ On ‘behavioural’ entry barriers, see Krattenmaker, T.G., Lande, R.H., & Salap, S.C., ‘Monopoly Power & Market Power in Antitrust Law,’ (1987) 76 Geo. L.J. 241, 257-58.

⁵¹ If successful predation had occurred previously, thereby possibly implicating behavioural economics and the availability heuristic, then the predating undertaking would have maintained high profit margins and

all direct and indirect consumers of a product in the case of multi-sided markets,⁵² predation in the sense of purposely incurring operating losses to win market share only rarely will introduce monopoly power, in which case recoupment very likely would follow the initial investment. Otherwise, predation primarily operates to protect market power.

Given market power, during the recoupment phase, an undertaking can lose market power if it fails to raise prices back to the pre-predation price level; it can maintain market power by returning prices to the pre-predation level; or it can gain market power by raising prices above pre-predation levels. Consumers as a group lose welfare in an absolute sense only if the dominant undertaking raises prices above the pre-predation price level. To take the two scenarios listed by Professors Areeda and Hovenkamp, if in the recoupment phase, the price increase lacks the size or duration to permit full recoupment, then the predation will have introduced lower overall prices relative to a ‘but-for’ world of no predation and no entry, thereby benefitting consumers.

In other words,⁵³ if the fact of paying above-cost prices counts as consumer harm, then absent predation, consumer harm occurs as well. Absent recoupment, consumer harm in both scenarios occurs even if prices settle above cost but below a level necessary to ensure recoupment. But consumer harm would have occurred anyway, thus predation minus recoupment mitigates consumer harm because consumers pay less than absent the predation. Paying a price equal to marginal cost or some other measure of the competitive price does not represent the ‘but-for’ world in these scenarios. Rather, consumers would have paid the much higher supra-competitive price charged prior to predation.



Professors Leslie and Hovenkamp might respond that the arguments above represent a static analysis, in that the ‘but-for’ price is not at the supra-competitive level existing prior to predation, but in a dynamic analysis, at the lower supra-competitive price level

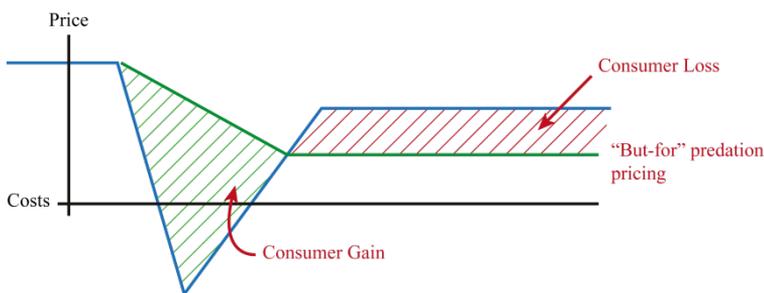
significant market power. The anticompetitive potential of predation in most instances, even after considering behavioural economics, still requires the existence of market power. See Strader, *supra* n.10.

⁵² See Gal & Rubinfeld, *supra* n.4 at 40.

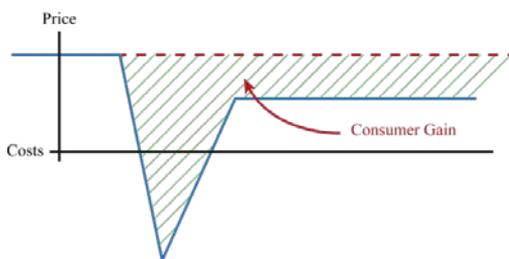
⁵³ Based on my drawings and instructions, Elin Brogstam Rylander, who works at Pixel Palace, Stockholm, Sweden, created the graphs.

that would have transpired absent the predation but given the market entry or expanded production of the targeted rival.⁵⁴

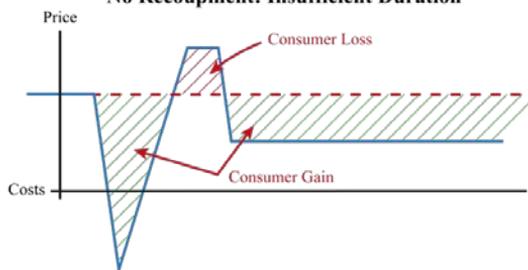
Recoupment Given "But-for" Pricing



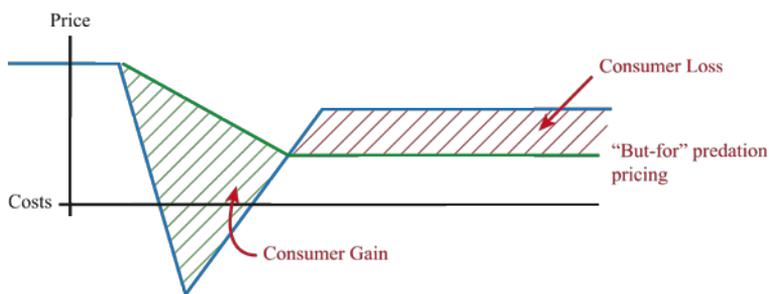
No Recoupment: Insufficient Size



No Recoupment: Insufficient Duration



Recoupment



The Sixth Circuit would agree.⁵⁵ If the post-predation price rises and remains above this more competitive 'but-for' price for a sufficient length of time, then the dominant undertaking will recoup the initial investment in below-cost prices and increase its market power relative to the 'but-for' price of increased competition but no predation. Thus the predation would have produced anticompetitive effects. Market power only increases if recoupment occurs, however. If prices settle below the more competitive 'but-for' price level absent predation, then recoupment cannot occur, and the predation would have lowered both the market power of the dominant undertaking and market-

⁵⁴ See Areeda & Hovenkamp, *supra* n.14 at 726c.

⁵⁵ See *id.* 54 (quoting *Spirit Airlines, Inc. v. Northwest Airlines, Inc.*, 431 F.3d 917, 949-951 (6th Cir. 2005) (Haynes, J.)).

wide prices. Consumers benefit from this. Yet note that all three price levels — the recoupment price level, the ‘but-for’ more competitive price level, and even the lower non-recoupment price level above cost — yield supra-competitive prices, and thus would warrant liability under Professor Leslie’s framework.

Professor Leslie also has argued that current U.S. predation law insufficiently accounts for the fact that predatory pricing implicates two separate consumer groups, one that benefits from lower prices during the predation phase, and another that pays higher prices during the recoupment phase. Predation injures this second group even if recoupment never occurs.⁵⁶ As an initial matter, the validity of this point depends on whether the products or services subject to predation constitute durable or non-durable goods: If non-durable, then the same consumers who initially pay lower prices subsequently will pay higher prices, since they purchase the goods frequently. If durable, then Professor Leslie’s point applies, since the long period between purchases means that different classes of consumers might purchase the product or service during the predation and recoupment phases. Yet even if some consumers gain at the expense of others, judges and competition authorities still must evaluate the entire practice, not just a portion of it.⁵⁷ Otherwise they would attach greater societal weight to the losses of one consumer group relative to the gains of a closely related alternative group, even if the gains exceed the losses, generating efficiency in the Kaldor-Hicks sense. Purchasing a product in different time periods does not justify separate legal or economic categories for consumers, so judges and competition authorities have no coherent basis to favour one consumer group over another, except by comparing gains to losses. The timing of a purchase is a random variable and in the context of predatory pricing, predominantly not within the control of the dominant undertaking. This argument carries particular weight if recoupment never occurs because the post-predation price never rises above the ‘but-for’ price level, in which case both categories of consumers would have benefited from the predation. Determining the net effects of a pricing practice that inherently develops over time will require assessing or predicting gains and losses during the entire course of the alleged anticompetitive act.

The final point relates to the policy choice and legal requirement not to punish the mere existence of monopoly power. Professor Leslie has stated that ‘raising “prices above a competitive level” is sufficient to show antitrust injury.’⁵⁸ As discussed above, both pre-predation prices and ‘but-for’ prices will have exceeded the competitive level, yet that fact alone does not justify liability. Courts and competition authorities (‘antitrust authorities’) have not condemned high prices, or exploitative abuses, mainly for the following reasons. First, antitrust authorities have great difficulty determining what constitutes a ‘high’ price, given the legitimate Austrian concern to promote the risk-taking, imitation, and investment that follow high profits, and that drive innovation

⁵⁶ See Leslie, *supra* n.11 at 1742; see also Rouseva, *supra* n.32 at 161; Nazzini, *supra* n.9 at 19; but see Rouseva, *supra* n.39 at 310.

⁵⁷ See generally Monti, *supra* n.17 at 213 (‘[E]conomists view exclusionary behavior as a strategy that takes time to play out ...’).

⁵⁸ See Leslie, *supra* n.11 at 1757 (internal citations omitted).

and economic growth.⁵⁹ Looking exclusively at the relationship between prices and costs does not reveal at what point in the competitive cycle a particular market has reached, whether high prices represent a sufficient reward for previous investment or innovation, or whether inchoate competitive restraints soon will produce additional innovation or lower prices.⁶⁰ A recoupment analysis forces antitrust authorities to examine market conditions closely. On the other hand, at some juncture, persistently high profit margins do not promote innovation but rather sustain inefficiency and the transfer of surplus from consumers to producers.

Scholars have made noteworthy efforts to quantify exploitative prices,⁶¹ and similar efforts likely will continue. But the rule of law and the concept of abusing a dominant position require that all individuals and companies must be able to ascertain the law in written form before suffering fines and jail sentences for violating it.⁶² Circuitously, the inability to identify high prices without instituting price regulation — which antitrust authorities lack the expertise and administrative capacity to implement proficiently, setting aside the potential harm it inflicts on a market economy — currently renders any antitrust prohibition against high prices impermissibly vague. The recoupment inquiry, by contrast, adequately confines the search for supra-competitive pricing. Antitrust authorities merely must determine whether prices rise, or likely will rise, high enough and long enough to recover an initial profit sacrifice. Stated differently, antitrust authorities have no legal power to demand competitive prices, or prices at some measure of cost. Rather, they have a remit to identify and punish exclusionary acts that harm consumers and that fall within legally recognized, or closely analogous, categories of abuse.⁶³ Particularly in the U.S. context, imposing treble damages for predation minus recoupment excessively would punish and deter conduct that lowers overall prices to consumers.⁶⁴

II(E). Sliding Scale

The U.S. and EU historically have measured competitive effects differently. Generally, an effects-based approach, usually contrasted with a formalistic approach, attempts to identify, prohibit, and prevent anticompetitive conduct by dominant companies that

⁵⁹ Van den Bergh, R. & Camesasca, P., *European Competition Law & Economics: A Comparative Perspective*, 86, 2d ed, London, Sweet & Maxwell, 2006 (discussed in: Jones, A. & Sufrin, B., *EU Competition Law*, 34, 4th ed, Oxford, Oxford University Press, 2011).

⁶⁰ See generally *id.*⁵⁹ at 88.

⁶¹ See, e.g., Ezrachi & Gilo, *supra* n.31.

⁶² See generally Lianos, I., 'Categorical Thinking in Competition Law & the 'Effects-based' Approach in Article 82 EC', in Ezrachi, A. (ed), *Article 82 EC: Reflections on its Recent Evolution*, 19, 36, Portland, Hart Publishing, 2009.

⁶³ See *id.* at 30.

⁶⁴ In fairness to Professor Leslie, he devotes only half of his article to the brave assertion against which I argue so vigorously above. While I consider his theoretical antipathy toward recoupment analyses on the merits, I cannot help but think that he is playing the role of provocateur. See, e.g., Ackerman, B., 'The Emergency Constitution' (2004) 113 Yale L.J. 1029; Tribe, L.H. & Gudridge, P.O., 'The Anti-Emergency Constitution' (2004) 113 Yale L.J. 1801; see also Ackerman, B., *Before The Next Attack*, New Haven, Yale University Press, 2006. I agree with Professor Leslie's initial claim that U.S. courts more readily should account for the expanded recoupment factors that he discusses in Section II of his article, see Leslie, *supra* n.11 at 1696.

harms consumers, at least partially measured by efficiency considerations.⁶⁵ Competitive effects could mean ‘empirical, observable findings’ of a higher price, lower output, or less choice, quality, or innovation affecting consumers after adoption of the challenged practice.⁶⁶ Alternatively, a consistent theory of consumer harm — repeatedly validated by factual observations, meaning market outcomes predominantly follow the predictions of the theory — could substantiate the effect on consumers.⁶⁷ In the predatory pricing context, the U.S. measures effects by whether the dominant firm recoups, or at least whether a ‘dangerous probability’ of recoupment exists.⁶⁸ Prior to *Post Danmark*, at least, the EU had adopted a sliding-scale of identifying the anticompetitive effects caused by predation — from damaged competitors, to distorted competition, to an implicit recoupment framework.

The objective furthest removed from NPI, protecting competitors can have both beneficial and nefarious consequences for competition and efficiency. On the one hand, without competitors, competition disappears, ushering-in the inefficiencies of monopoly. The model of perfect competition — the pinnacle of efficiency and thus the ideal or paradigm for many markets — features numerous competitors, all driving price to the cost of production. Thus the presence of competitors usually signals healthy markets. Yet competition mandates that the most consumer-responsive and efficient undertakings win profits and market share, and that less-responsive and inefficient undertakings depart the market to free-up resources for other productive uses and to permit more efficient undertakings, whether the dominant undertaking or rivals in other markets, to produce additional output at lower cost to society.⁶⁹ Legally protecting the inefficient can lead to a sclerotic market in which the incentive to innovate or lower costs dissipates with the inability to enhance profits by eliminating competitors, who essentially waste resources better utilized by the efficient.

The relevant questions when considering whether legally to protect competitors, therefore, are, first, which competitors — the law has an interest in protecting competitors that constrain the dominant undertaking from raising prices; and second, from what — competition on the merits or exclusionary practices. Predatory pricing, however defined, constitutes an exclusionary practice, if established. A certain economic logic attaches to considering whether the alleged victim of predation actually constrains the dominant undertaking’s pricing when applying the predation test. Yet a dominant undertaking reasonably would not risk the investment in losses that predation demands unless the targeted rival restrains its prices. Otherwise the monopolist needlessly forfeits revenues to eliminate or weaken an irrelevant competitor. Assuming,

⁶⁵ Lianos, I. & Korah, V., *Competition Law: Cases & Materials*, 150, Oxford, Hart Publishing (forthcoming 2015).

⁶⁶ Lianos, *supra* n.62 at 20.

⁶⁷ *Id.*

⁶⁸ See *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 106 S.Ct. 1348 (1986). For a discussion of how U.S. state laws on predatory pricing differ from federal laws, see Wagner-von Papp, F., ‘Comparative Antitrust Federalism & the Error-Cost Framework’, in Petit, N. & Ramundo, E. (eds), *An Antitrust Tribute, Liber Amicorum for William E. Kovacic*, Volume II (Institute of Competition Law, forthcoming), available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2391258.

⁶⁹ See generally Art 82 Guidance Paper (2009/C 45/02), 6.

therefore, that the targeted rival restrains the monopolist's pricing, protecting that competitor plausibly enhances competition over the medium term, which promotes consumer welfare. The above reasoning reduces the relevant questions to whether the price-cut represents merit competition or anticompetitive exclusion and what happens to prices going forward. For administrative and rule of law purposes, such questions require line-drawing somewhere, at some measure of consumer welfare or at some measure of efficiency, currently at AVC, Average Avoidable Cost, and ATC (or long-run average incremental cost).⁷⁰ After establishing that line, a recoupment requirement ensures that the challenged price-cut, which invariably will benefit consumers initially, ultimately harms them. Considering the fact that the targeted rival likely constrains an undertaking with significant market power, otherwise it would not sacrifice profits, judges and competition authorities closely should examine predation claims. A recoupment analysis provides the legal and economic mechanism to analyse the decisive effect of the price-cut on consumers and on the relevant market.

In considering the effects of predation, the Commission has found damage to the alleged victim relevant to finding liability. For instance, the Commission in *AKZO* stated that '[t]he result of these systematic low price offers from AKZO UK ... was that ECS gradually lost the business of its three most important large independent customers plus several individual Allied Mills.'⁷¹ Additionally, the Commission has found as a relevant effect of predation the potential elimination of a competitor: 'Tetra Pak could ... have continued to pursue this policy [predatory pricing] until the total disappearance from the Italian market of Elopak ... without suffering major financial damage.'⁷² By measuring the effects of predation in the loss of a competitor's customers or in the complete elimination of a particular competitor — rather than whether AKZO or Tetra Pak could raise prices high enough and long enough to recoup the investment in below-cost pricing — the Commission explicitly engaged in a foreclosure analysis aimed at protecting competitors.

More in accord with NPT, the Court of Justice has measured effects by whether price-cuts harm *competition*: 'to assess the existence of anti-competitive effects ... it is necessary to consider whether that pricing policy ... produces an actual or likely exclusionary effect, to the detriment of competition and, thereby, of consumers' interests.'⁷³ The Court of Justice does not explicitly state here how to determine whether a pricing policy harms competition, but the shift in emphasis from competitors to competition theoretically matters, since to prove harm to competition, the Commission must establish more than mere harm to the alleged victim of predation. The status of the excluded or weakened competitor may determine whether the predatory pricing scheme can harm competition. The economic justification for any cost test is that prices below a relevant measure of cost theoretically can exclude as-

⁷⁰ See ICN Report, *supra* n.30 at 3-4, 2.

⁷¹ *ECS/AKZO* [1985] OJ L374/1, 41 (found in, Lianos, *supra* n.27 at 187-202).

⁷² IV/31043-*Tetra Pak II*, Commission Decision of 24 July 1991 (92/163/EEC), 150 (found in, Lianos, *supra* n.27 at 187-202).

⁷³ Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 44.

efficient competitors, and only their active presence in the competitive process matters for consumer welfare.⁷⁴ Conversely, the elimination of relatively inefficient competitors harms neither the competitive process nor consumers. Yet the Court of Justice could not have been referring merely to the exclusion of hypothetically as-efficient competitors in *Post Danmark* because the as-efficient competitor test, established in *AKZO*, never required proof of ‘an actual or likely exclusionary effect.’⁷⁵ It rather required only a potential exclusionary effect, determined hypothetically by analysing the relationship between the dominant undertaking’s prices and costs. To further require proof that the below-cost price actually did or will exclude an as-efficient competitor seems tautological and unnecessary. Such a requirement would eliminate the administrative effectiveness and negate the economic logic that has justified use of the as-efficient competitor test. The *Post Danmark* Court must have been articulating an altogether separate concept.

The Commission in *Wanadoo*, which preceded *Post Danmark*, set-out a broader conception of the competitive process and consumer welfare, and thereby may have anticipated the alternative level of proof necessary to establish harm to competition beyond mere harm to a particular competitor. The extra proof relates to the status of the competitor potentially or actually eliminated.⁷⁶ Not just any competitor, or a competitor that restrains the dominant undertaking, or even an as-efficient competitor, but harm to competition occurs when the predatory pricing targets the ‘most determined’ and ‘most advanced’ competitor — or perhaps, as Professor Monti has stated, the dominant undertaking’s closest competitor,⁷⁷ however efficient. Eliminating a monopolist’s closest competitor harms competition because in a market already characterized by insufficient competition, the closest competitor will apply the greatest restraint on additional price increases, the loss of which guarantees precisely that.

A legal requirement to examine the competitive status of the predation target mandates a closer examination of the relevant market, similar to assessing competitive constraints during merger review,⁷⁸ to determine to what extent the target restrains the dominant undertaking. After all, both merger analysis and assessing predation from the perspective of consumer welfare involve predicting competitive effects.⁷⁹ The analogy

⁷⁴ See generally Nazzini, *supra* n.9 at 246.

⁷⁵ Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 44.

⁷⁶ COMP/38.233 – *Wanadoo Interactive*, Commission Decision of 16 July 2003, at 369 (found in Lianos, *supra* n.27 at 187-202; see also Case T-340/03 *France Telecom SA v. Commission*, [2007] ECR II-107, 261 (discussing the effect of predation on WIN’s closest competitor).

⁷⁷ A.82 Guidance Paper (2009/C 45/02), 20. For a discussion of the application of merger analysis to abuse of dominance cases, see Monti, *supra* n.17 at 146, 153, 251; Evans, D.S., ‘Lightening Up on Market Definition’, in Elhaage, E. (ed), *Research Handbook on the Economics of Antitrust Law*, 53, 60, Cheltenham, Edward Elgar, 2012.

⁷⁸ I perceived the relevance of this approach to my research during the week of 23 April 2012 while listening to a law and economics lecture given by Professor Daniel L. Rubinfeld at the Gerzensee Study Center, Switzerland.

⁷⁹ See, e.g., Opinion of Advocate General Mazák in Case C-202/07 P *France Telecom SA v. Commission* ECLI:EU:C:2008:520, 76 (‘proof of the possibility of recoupment is inherently *ex ante* and forward-looking, assessing the market structure as it will be in the future’).

most closely extends to the process of analysis rather than to matching the substantive objectives of the respective inquiries, however, because in the merger context, competition authorities attempt to determine ‘whether the merger would create or increase market power.’⁸⁰ In the predation context competitive conditions have not prevailed,⁸¹ and Art 102 TFEU does not prohibit the mere existence of dominance, or the ability to price above competitive levels, since productive investment or better serving consumer interests can confer market power as well. Rather, a separate abuse must occur to violate the provision, in this case, pricing below cost. If the predation increases or appears likely to increase the pre-existing market power of the dominant undertaking, then recoupment either would have occurred or appears likely to occur. In the context of evaluating a merger or determining whether a predator will recoup and thereby enhance its market power, assessing competitive restraints can reveal the likely market effects of the combination or the price-cut.

In some markets, a dominant undertaking’s closest competitor may exert little price restraint, such as when that rival is a member of the competitive fringe — usually a number of firms that even together restrain a monopolist only sparingly. In other markets, a dominant undertaking’s closest competitor actually may prevent price-increases that would follow its elimination from the market. An example might consist of the restraint that the combined Bing-Yahoo search engines, which together account for roughly 30% of the internet search market in the United States,⁸² exert on Google, which controls the remainder of the market. Or a market analysis might reveal that an undertaking with the third or fourth highest market share most acutely restrains the dominant undertaking’s pricing because of, for instance, exceptionally low costs, a history of successful innovation, or simply a distinct willingness to price aggressively and directly compete with the dominant company.⁸³ Even the presence of less efficient competitors can prevent the dominant undertaking from raising prices,⁸⁴ though *Post Danmark* instituted a safe harbour for price-cuts above the dominant company’s ATC.⁸⁵ In all events, examining to what extent targets of predation restrain the dominant undertaking’s pricing converts the focus of effects-analysis from competitors to competition.

Effects-analysis in the U.S. predation context centres on recoupment, while in the EU, prior to *Post Danmark*, ‘proof of recoupment of losses [was] not a precondition for a finding of abuse through predatory pricing.’⁸⁶ But even before that decision, EU Institutions have attached considerable significance to evidence demonstrating the fact or likelihood of the dominant undertaking recovering, through price-increases, an initial

⁸⁰ O’Donoghue, R. & Padilla, J., *The Law & Economics of Article 102 TFEU*, 2d ed, 638, Oxford, Hart Publishing, 2013.

⁸¹ Rousseva, *supra* n.39 at 25.

⁸² ‘Taking Sides: Microsoft & Yahoo! Strike a Long-Awaited Deal,’ *The Economist*, 29 July 2009.

⁸³ See Staff Discussion Paper (December 2005), 33.

⁸⁴ See *id* 83. at 24.

⁸⁵ See Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 36.

⁸⁶ COMP/38.233 – *Wanadoo Interactive*, Commission Decision of 16 July 2003, 335.

investment in lower prices. In *Wanadoo*, for instance, the Commission stated that the alleged predation allowed Wanadoo to capture ‘80-90% of the growth in the high speed market during the whole of 2001,’⁸⁷ evidence evincing an ability to control and raise prices and thus an ability to recoup. Although on appeal, evidence of recoupment was less clear-cut.⁸⁸ In a sense, recoupment analysis inherently incorporates the objective of promoting competition, because actual or likely recoupment reflects the absence of competition, or at least significantly weakened competition. Again, the Commission supported a finding of liability in *Tetra Pak* by discussing the effects of predation in terms that reflect an enhanced probability of recoupment, stating that the predation ‘allowed Tetra Pak to maintain its near-monopoly position in the aseptic sector (market share of 90 to 95%) and reinforce its position in the non-aseptic sector (market share increasing from +40% in 1980 to +50% to 55% today).’⁸⁹

Dividing effects into components such as the influence of low prices on competitors, competition, and the likelihood of recoupment potentially misleads in that a relationship generally exists between all three variables. The weakening of particular competitors may impede the process of competition, which in turn would raise the likelihood of recoupment. Conversely, strong competitors ensure robust competition, precluding recoupment. Evidence of all three components may not exist in any given case, forcing competition authorities and judges to deduce overall effects, or recoupment, based on a single, or multiple components. A subtle difference nevertheless remains between aiming to protect competitors from low prices and extending legal liability only when low prices threaten competition, and when market conditions support recoupment. In finding anti-competitive effects, the Commission in *Wanadoo* demonstrated the dependency between the three components when it discussed how the predation scheme nearly doubled the dominant undertaking’s market share, up to 80%.⁹⁰ In addition, it eliminated a competitor, significantly reduced the market shares of other competitors, and ensured that competition ‘grew very slowly or stagnated at an insignificant level.’⁹¹ Although not explicitly mentioning recoupment, gaining considerable market share while materially weakening competitors and marginalizing the growth of competition supports finding a likelihood of recoupment, though other market conditions matter as well.⁹²

⁸⁷ *Id.* 86. at 371.

⁸⁸ Compare Case T-340/03 *France Telecom SA v. Commission*, [2007] ECR II-107, 93-96, 188, 221, 254-55 (challenging existence of dominance, asserting low entry barriers, and pointing to market share fluctuations during predation), with *id.* at 98, 103, 257-258, 261-264 (highlighting that defendant’s market share increased because of predation, that the predation weakened or eliminated competitors, and that the predation deterred rival expansion); see also Rousseva, *supra* n.39 at 167-68.

⁸⁹ IV/31043-*Tetra Pak II*, Commission Decision of 24 July 1991 (92/163/EEC), 184.

⁹⁰ COMP/38.233 – *Wanadoo Interactive*, Commission Decision of 16 July 2003, 400.

⁹¹ *Id.*

⁹² See Case T-340/03 *France Telecom*, *supra* n.88.

III. DOMINANCE ENSURES RECOUPMENT

Neoclassical Price Theory (NPT) has significantly influenced how EU Institutions have evaluated predatory pricing claims in that the NPT tenets of rationality, competition, and efficiency conceptually justify the concept of dominance and supply the theoretical support for cost tests. Because dominance reflects historic and present market power, however, and does not necessarily establish the ability to wield substantial market power into the future, NPT also supports conducting a recoupment analysis when evaluating predation claims.⁹³ Below I critically assess, first, the link between dominance and recoupment from a legal perspective and from the perspective of NPT, and second, the NPT calculus of measuring the anticompetitive effects of predation in terms other than price, which could weaken the legal imperative of conducting a recoupment analysis.

III(A). Legal & Theoretical Support for Presuming Recoupment

From a legal perspective, the definition of dominance suggests that any monopolist engaging in predation likely would recoup because dominance creates ‘a position of economic strength’ that empowers the undertaking, ‘to prevent effective competition being maintained on the relevant market’ and to act ‘to an appreciable extent independently of its competitors, its customers, and ultimately of ... consumers.’⁹⁴ If by ‘effective competition,’ the Commission means the ability of competitors to expand production or enter a market in response to higher prices that follow below-cost prices, then the existence of effective competition prevents recoupment. Conversely, if dominance actually precludes the existence of effective competition — conferring on the monopolist the ability to price independently of competitors or the ability to raise prices without losing market share — then dominance greatly facilitates recoupment. This semantic exercise merely illustrates that whether the recoupment presumption reflects reality represents an empirical issue or a question of actual effects, since EU Institutions have reasoned from NPT principles when presuming recoupment. Dominance or market power signifies the application of the monopoly model, in which price competition previously had failed to prevent the monopolist from raising prices well-above marginal cost.

Whether that market power is enough to enable the dominant undertaking to recoup any initial investment in lower prices depends on the extent and duration of the initial losses sustained, the extent of market power during the recoupment phase of predation, the ‘but-for’ price level that would have existed absent predation,⁹⁵ and the extent and

⁹³ See Opinion of Advocate General Mazák in Case C-202/07 P *France Telecom SA v. Commission* ECLI:EU:C:2008:520, 76; see also Gormsen, L.L., *A Principled Approach to Abuse of Dominance in European Competition Law*, 145, Cambridge, Cambridge University Press, 2010 (discussing A.G. Mazák’s support for a recoupment element).

⁹⁴ See *ECS/AKZO* [1985] OJ L374/1, 67.

⁹⁵ Professor Nazzini has argued that the complexity of calculating the ‘but-for’ price greatly would favour defendants. See Nazzini, *supra* n.9 at 67. Not necessarily, since we know that price would be above cost, we would know the prices actually charged by the dominant undertaking and the prey prior to predation, and documentary evidence of the dominant undertaking might discuss the range of pricing options considered prior to selecting the predatory price.

duration of pricing above that ‘but-for’ level. A finding of simple dominance, therefore, does not establish the relationship between market power and profit sacrifice necessary to prove recoupment.

III(B). A Reasonable Presumption?

Monopolists predate to recoup. Predation without a second stage of recoupment constitutes a strategy to incur losses willingly and unnecessarily, to purposefully fail to maximize profits — and thus such a strategy makes little sense. In all events, predation without recoupment poses no antitrust concern since lower prices now unaccompanied by proportionally higher prices later simply benefit consumers by lowering overall prices. Given that logic derived from Neoclassical Price Theory (NPT), a predation doctrine lacking a recoupment element, such as the doctrine historically applied in the EU, would appear at best incomplete, and at worst harmful to consumers, unless dominance actually does ensure recoupment.⁹⁶

The argument runs that dominance signifies notably weakened competitors; a combination of acute product differentiation, predominately low elasticities of demand, large and durable market shares and profit margins, and steep entry barriers. Dominance signifies, in short, the ability to recover any initial investment in below-cost pricing by raising prices to supra-competitive levels without customers fleeing to competitors. Such dominance may herald a likelihood of recoupment in cases of significant market power and moderate profit sacrifice. To account for the absence of an explicit attempted monopolization doctrine, however, the EU Commission has found dominance at levels of market share that would not implicate monopolization in the U.S. sense.⁹⁷ Moreover, even unqualified dominance does not necessarily indicate an ability to recoup: depending on the extent and duration of predation, recoupment may require sustained or greater market power than simple dominance.⁹⁸ For example, the predation scheme in *Matsushita* lasted 20 years, suggesting the defendants would have needed a near monopoly for an extended period to recover the mountainous sum of losses incurred.⁹⁹ An undertaking similarly would need greater market power to recoup a drastic cut in prices during the predation phase of a predatory pricing scheme, or if the target of the scheme does not leave the market or demonstrate pricing contrition immediately.¹⁰⁰ Conversely, a brief period of predation, price-cuts directed at only a portion of the market or at only at a handful of customers, or predation that represents an incremental fall in prices, all would require materially less market power to sustain recoupment.

⁹⁶ The EU essentially conducts the recoupment analysis before considering any relationship between cost and price, as endorsed by Judge Easterbrook in *A.A. Poultry Farms*, 881 F.2d at 1401 (‘Market structure offers a way to cut the inquiry off at the pass ... Only if market structure makes recoupment feasible need a court inquire into the relation between price and cost.’).

⁹⁷ Gal & Rubinfeld, *supra* n.4 at 44.

⁹⁸ See Rouseva, *supra* n.39 at 167.

⁹⁹ *Matsushita*, 475 U.S. at 592, 106 S.Ct. at 1359.

¹⁰⁰ See Kavanagh, J., Marshall, N. & Niels, G., ‘Reform of Article 82 EC — Can the Law and the Economics be Reconciled?’, in Ezrachi, A. (ed), *Article 82 EC: Reflections on its Recent Evolution*, 1, 5, Portland, Hart Publishing, 2009.

Considerations other than the degree of market power also might prevent recoupment. A monopolist may fail to recoup either if the initial price-cut was too steep or the resulting price-rise too small. Because of the availability heuristic, perhaps the fact of entry raised the probability of future entry, at least in the minds of dominant firm managers, dampening subsequent price-increases.¹⁰¹ Or perhaps competition exists for the market, rather than in the market¹⁰² — in which case, again, even failed entry may trigger the availability heuristic and deter price increases to levels existing prior to predation, since excessively high prices carry a precipitous downside in such markets. A recoupment presumption necessarily ignores all such factors that might prevent a price-cut from harming consumers.

The Commission in *Wanadoo* set-out why EU predation law does not require a showing of recoupment:¹⁰³ It reserved the right to intervene in a market, ‘as soon as there is a risk that competition may be distorted, regardless of any prospect of loss recoupment.’¹⁰⁴

The Commission articulates two points here, one temporal and the other a matter of emphasis, both stemming from NPT but reflecting unique EU interpretations. The first, temporal consideration reflects the aspiration to prevent anti-competitive effects long before they already have distorted market structure or harmed consumers. Although reasonable minds can differ at what juncture the prospect of anti-competitive effects justifies government intervention, few would disagree that competition authorities have the discretion to intervene prior to when exclusionary conduct results in a monopoly. U.S. predation law also sanctions pre-emptive intervention, in that *Brooke Group* demanded that plaintiffs demonstrate ‘a dangerous probability of recoupment,’ not actual recoupment¹⁰⁵ — though ‘dangerous probability’ suggests a showing closer to actual anti-competitive effects than the language in *Wanadoo*. However, the Commission appears here to misconstrue the concept of recoupment when it declares that the risk of anti-competitive effects justifies market intervention ‘regardless of any prospect of loss recoupment.’¹⁰⁶ Absent the prospect of recoupment, which can occur over various time periods and in multiple markets, lower prices will not harm consumers of the relevant product, regardless of how the price-cut otherwise might distort competition. After removing the prospect of recoupment, lower prices only can damage or exclude competitors and possibly reduce variety, not produce anticompetitive effects in terms of higher prices. EU consumers vigorously might

¹⁰¹ Cf. Strader, *supra* n.51 at 60-62.

¹⁰² See A.82 Guidance Paper (2009/C 45/02), 20.

¹⁰³ But see Opinion of A.G. Fennelly in Joined Cases C-395/96 P & C-396/96 P, *Compagnie Maritime Belge Transports & Others v. Commission*, [2000] ECR I-1365, 136 (arguing that recoupment is an implicit aspect of predation).

¹⁰⁴ COMP/38.233 – *Wanadoo Interactive*, Commission Decision of 16 July 2003, 333. The Court of Justice repeatedly has affirmed this holding, see Case C-202/07 P *France Telecom SA v. Commission of the European Communities*, [2009] ECR I-2369, 37; at 110, 113; see also Case C-333/94 P *Tetra Pak Int'l SA v. Commission of the European Communities*, [1996] ECR I-5951, 44.

¹⁰⁵ *Brooke Group v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 222, 113 S.Ct. 2578, 2587 (1993).

¹⁰⁶ COMP/38.233 – *Wanadoo Interactive*, Commission Decision of 16 July 2003, 333.

object if the Commission precluded lower prices to protect competitors or for the sake of greater product variety.

As evidence that price best encapsulates consumer welfare, in the context of predation, and thus that judges and competition authorities should measure recoupment in higher prices, consider product choice and quality more closely. The Court of Justice in *Post Danmark* argued that “price, choice, quality, [and] innovation” constitute separate components of efficiency.¹⁰⁷ Product quality surely affects consumer demand and the price level that a company may charge. But an efficient level of quality simply refers to companies producing, at cost, the amount of product quality for which consumers will pay. Quality is a characteristic of demand, not a separate characteristic of efficiency.

Product choice or variety refers to the number of differentiated goods satisfying a common consumer need. That number will depend on consumers’ willingness to pay to support various suppliers of the good. Whether the suppliers are producing efficiently, or close to their costs of production, constitutes a separate inquiry, though consumers are more likely to support efficient alternatives. Neither product choice nor lower prices represent unmitigated consumer benefits. While differentiation produces greater consumer choice, it can occur only when market power exists. Product differentiation thus indicates prices above the competitive level¹⁰⁸ and the absence of the homogeneous goods traded in perfect competition. Product differentiation also signifies the replication of similar inputs to serve an identical consumer need, which could generate allocative inefficiency.

More generally, market characteristics such as variety or product quality influence market definition, demand and supply substitutability, and elasticities of demand. Dominant firm price-cuts will have little effect on product offerings of sufficiently distinct quality, because distinct products feature different elasticities of demand, serve different consumer needs, and thus operate in different markets. Defining markets represents a separate step from determining whether the suppliers in that market operate efficiently. Within a properly defined market where roughly similar levels of quality exist, most consumers prefer lower prices.

A competition policy agnostic toward considerations of choice, quality, and innovation would maximize neither consumer nor societal welfare. However, attempting to maximize choice, quality, and innovation presents extraordinary measurement difficulties. Choice and quality represent subjective, fickle, and correlated consumer interests that diverge across product and geographic markets.¹⁰⁹ Even obtaining the relevant evidence would prove a colossal challenge, though the technology permitting the accumulation of such data probably already exists.¹¹⁰ If such information were not available, competition authorities originally would have to formulate idealized

¹⁰⁷ See Case C-209/10 *Post Danmark A/S v. Konkurrenceradet, Forbruger-Kontakt a-s*, ECLI:EU:C:2012:172, 22.

¹⁰⁸ See Akman, P., *The Concept of Abuse in EU Competition Law*, 292, Oxford, Hart Publishing, 2012.

¹⁰⁹ See Monti, *supra* n.17 at 85.

¹¹⁰ Proprietors of virtual and real stores could send visitors simple electronic messages requesting information on product preferences, though most consumers would not respond unless compensated for their time. Shop owners could monitor or buy information concerning consumers’ preferences and purchases online.

preferences based on historical price and product development data. The synthetic nature of this alternative process risks inaccuracy, paternalism, and even regulatory capture by manufacturers and workers whose interest in economic survival, and thus incentive to influence regulation, far exceeds a general consumer interest in product characteristics.¹¹¹

NPT relies on the price mechanism to reflect variations in product variety and quality. It incorporates supply considerations, not only the costs of production, but also ingenuity, investment, and local regulations. In well-functioning markets, consumers' willingness to pay ultimately will determine levels of product variety and quality. Despite consumer short-sightedness and 'because of self interest,'¹¹² the market enables consumers to reveal their wants and desires. The price mechanism further 'puts weights on these desires and provides a simple index — relative prices — by which to assess relative demand.'¹¹³ Given the presence of market power, however, dominant undertakings have greater freedom to dictate and manipulate the levels of variety and quality available in a market.

Competition authorities might prove more adept at identifying exclusionary policies that impeded innovation. But they will have difficulty proving causation here, since innovation depends on a multiplicity of factors, from culture, to the existence of entrepreneurial clusters such as Silicon Valley,¹¹⁴ to government policies, to access to funding, to interest rates. Competition authorities more easily can observe increases and decreases in prices compared to fluctuations in other characteristics of consumer welfare.¹¹⁵ In any event, price generally incorporates the other characteristics better than any available substitute. When attempting to assess recoupment, therefore, price levels provide the most accurate measure.

The second point raised by the Commission in *Wanadoo* emphasizes that even if a trade-off between prices and consumer choice, product quality, or innovation incentives exist, EU Institutions historically have chosen to advance the process of medium-term competition over all other considerations, including the consumer benefits generated by short-term lower prices. Given this motivation to guard the process of medium-term competition, the predation offense occurs strictly by pricing below-cost, which weakens already insufficient competition, not by subsequently harming consumers by raising prices and recouping. This position implicitly assumes that, because of dominance, eliminating or marginalizing already insufficient competition significantly raises the likelihood of recoupment, or that exploiting consumers with higher prices almost always follows from excluding competitors.¹¹⁶ A recoupment presumption requires no evidence that foreclosure reaches a threshold of

¹¹¹ See Monti, *supra* n.17 at 85.

¹¹² Komesar, N.K., *Imperfect Alternatives: Choosing Institutions in Law, Economics, & Public Policy*, 260, Chicago, University of Chicago Press, 1994.

¹¹³ *Id.*

¹¹⁴ See, e.g., 'London's Tech City: Start Me Up,' *The Economist*, 5 Oct. 2013.

¹¹⁵ See Monti, *supra* n.17 at 85.

¹¹⁶ See Gormsen, *supra* n.93 at 144; Rousseva, *supra* n.39 at 160-61.

material foreclosure.¹¹⁷ The presumption further ignores whether sufficient barriers exist to withstand entry by potential rivals no matter how high or how long the dominant undertaking must raise prices due to originally drastic or prolonged price-cuts. Finally, under a recoupment presumption, the dominant undertaking, rather than remaining or differentiated rivals, automatically will acquire and maintain the market share lost by excluded or marginalized competitors, both during the predation and recoupment phases of the abuse.¹¹⁸ In short, a recoupment presumption appreciably lightens the evidentiary burden necessary to establish predation.

In further stressing the anti-competitive effects of predation even in the absence of recoupment, the Commission in *Wanadoo* additionally argued that:

‘In certain specific cases, the undertaking may embark upon a strategy of predation with aims other than the achievement of operating margins higher than those which would prevail in a competitive context ... [The undertaking] also may abandon the idea of recouping all its initial losses and concentrate instead on balancing its future costs and revenues. Lastly, it may aim at recoupment in the long term by means other than its operating results.’¹¹⁹

In the first and third hypothetical scenarios, which remove higher profits as the impetus for predation, a rational monopolist would not engage in predation unless the strategy yielded operating profits in the predation market or in an adjacent market, now or later. Recoupment only can manifest in the generation of profits, otherwise wilfully forgoing revenues and squandering cash by charging below-cost prices simply constitutes non-profit-maximizing behaviour that does not harm consumers. As to the second *Wanadoo* claim, failed predation, whether originally rational or not, benefits consumers, though it may eliminate variety. Competition law focused on consumer welfare even might promote failed predation; consumers pay higher prices only when predation succeeds.

The more relevant question for enforcement is how liberally to define recoupment. Narrow definitions of recoupment — such as requiring recoupment to occur in the same product market as the initial price-cuts or in the near-future, while ignoring dynamic considerations such as heuristics, game theory, and the deterrent effect of predation¹²⁰ — would make predatory pricing harder to establish. By contrast, extending the timeframe over which to measure recoupment, permitting proof of recoupment in other markets, and allowing substantiation of the deterrent effect of predation, all would make predation relatively easier to establish.¹²¹ Further accounting for the administrative costs of monopolization enforcement and the potential chilling effect of predation doctrine on monopolists contemplating lowering prices,

¹¹⁷ Cf. O’Donoghue & Padilla, *supra* n.80 at 288 (defining the concept).

¹¹⁸ See Rousseva, *supra* n.39 at 195.

¹¹⁹ COMP/38.233 – *Wanadoo Interactive*, Commission Decision of 16 July 2003, 334.

¹²⁰ For an examination of these factors, see Strader, *supra* n.51 at 47-65 (& sources cited therein). After a presentation on 12 March 2013 to the Swedish Competition Authority (SCA), during which I discussed behavioural economics in the context of U.S. predation law, Johan Sahl, a lawyer at the SCA, mentioned that behavioural considerations would fit appropriately within the recoupment framework.

¹²¹ See also Leslie, *supra* n.11 at 1713-1740.

competition authorities wisely might avoid expending scarce resources policing and possibly deterring price cuts that appear unlikely to produce higher overall prices.

Instructing the Commission to prove a likelihood of recoupment when prosecuting predatory pricing admittedly would make such claims more difficult to establish.¹²² Although the Commission has brought sparse few predation cases, EU appellate courts thus far have affirmed liability in all of them.¹²³ A recoupment element would continue the evolution of EU competition law towards an approach that fully accounts for economic effects when evaluating purportedly anticompetitive practices. Alternatively, a recoupment presumption renders EU predation law *less* effects-focused than U.S. predation law, since it assumes the existence of consumer harm. By interpreting the obligation to prove ‘actual or likely’ exclusionary effects that harm competition and ‘thereby’ consumers, as stated in *Post Danmark*,¹²⁴ to mean an obligation to prove ‘recoupment,’ EU Institutions simply would be demanding the careful market examination that characterizes all effects analyses.

IV. RECOUPMENT ELEMENT RATHER THAN PRESUMPTION

The above discussion mostly sets-out how EU predation doctrine has developed without an explicit recoupment mandate. After *Post Danmark*, however, the EU Court of Justice arguably no longer presumes that recoupment automatically follows from below-cost pricing and dominance, at least when the challenged prices fall below the dominant undertaking’s average total cost (ATC), yet above its incremental costs.¹²⁵ *Post Danmark* involved facts similar to those of *Deutsche Post* in that a government sponsored dominant undertaking utilized infrastructure and staff in the regular post market where it held a universal service obligation to compete in a separate market, specifically the market for distributing unaddressed mail.¹²⁶ The Danish Supreme Court requested the opinion of the Court of Justice because, while *Post Danmark* offered prices to an important customer of a competitor that exceeded its incremental costs, those prices were below *Post Danmark*’s ATC of providing unaddressed mail.¹²⁷ Following *AKZO* and *Deutsche Post*, to qualify as predatory pricing, the Danish Competition Authority additionally needed to prove a plan or scheme to exclude the

¹²² Focusing on intent, by contrast, makes such claims easier to establish. See Gormsen, *supra* n.93 at 146-47 (arguing that intent has substituted for effect in EU cases); see also Rousseva, *supra* n.39 at 159 (discussing the General Court’s reliance on intent in *France Telecom*).

¹²³ Gormsen, *supra* n.93 at ix (stating that the Commission has a 98% success rate in Art 102 cases and similar success on appeal). For an excellent summary, in table form, of all A.102 decisions, see Lianos, *supra* n.27 at 187-202. The Commission notably has prosecuted only a few predation claims over the last 30 years, usually involving subsidization between markets and multiple exclusionary abuses, which suggests it does not view predation as a significant threat to consumers, at least when employed as the only exclusionary practice. Thanks to Prof Lianos for questioning the stringency of EU predation enforcement.

¹²⁴ Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 44.

¹²⁵ The Court of Justice previously has intimated that forgoing proof of recoupment makes the most sense for prices below average variable cost, because such prices usually reflect a strong exclusionary intent. See Case C-202/07 P *France Telecom SA v. Commission*, [2009] ECR I-2369, 110.

¹²⁶ Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 32.

¹²⁷ *Id.* at 35.

target of the price-cut from the unaddressed mail delivery market.¹²⁸ Both the Danish Competition Authority and Supreme Court could find no such plan.¹²⁹ Post Danmark proffered evidence that securing the business of Coop, the customer to whom it offered prices below ATC, allowed Post Danmark to lower its costs of distributing unaddressed mail by DKK 0.13 per item from 2003 to 2004,¹³⁰ though the Danish Competition Authority did not attribute the lower costs to economies of scale in distribution.¹³¹ The Court of Justice also found that the competitor targeted by Post Danmark's alleged predation, Forbruger-Kontakt, never left the unaddressed mail delivery market and subsequently, in 2007, managed to win the business of Coop back from Post Danmark.¹³²

Advocate General Mengozzi recommended an approach that did not consider the presence or absence of an intention to exclude Forbruger-Kontakt dispositive, despite challenged prices between the incremental costs and ATC of Post Danmark.¹³³ Yet AG Mengozzi still advised the Court of Justice to examine anticompetitive effects roughly based on the reasoning applied in *Deutsche Post*, which looked to whether the dominant undertaking could subsidize low prices in the competitive market with profits earned in the monopolized market.¹³⁴ The Court of Justice followed the AG's advice by disregarding the intention of the dominant undertaking,¹³⁵ thereby reversing the Court's own holding in *AKZO*,¹³⁶ but articulated a much wider principle of law for appraising the competitive effects of price-cuts below the dominant undertaking's ATC but above its incremental costs:

‘to assess the existence of anti-competitive effects in [the circumstances of this case], it is necessary to consider whether that pricing policy, without objective justification, produces an actual or likely exclusionary effect, to the detriment of competition and, thereby, of consumers’ interests.’¹³⁷

Given the emphasis on competition, the above passage permits the following two readings. The first focuses on foreclosure, or whether the price-cut actually has, or likely will, exclude a competitor, instead of presuming that fact for price-cuts below AVC. Such an approach would ignore a predation scheme that merely weakens competitors yet permits recoupment, and it would negate a primary attribute of the as-efficient competitor test, which does not require proof of actual anticompetitive effects.¹³⁸ Surely the Court did not mean that any excluded rival must prove that it

¹²⁸ See Opinion of A.G. Mengozzi in Case C-209/10 *Post Danmark*, ECLI:EU:C:2011:342, 39.

¹²⁹ See Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 29.

¹³⁰ *Id.* at 10.

¹³¹ *Id.* at 11.

¹³² *Id.* at 39.

¹³³ Opinion of A.G. Mengozzi in Case C-209/10 *Post Danmark*, ECLI:EU:C:2011:342, 121-122.

¹³⁴ See *id.* at 123.

¹³⁵ Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 36.

¹³⁶ Case C-62/86 *AKZO v Commission* [1991] ECR I-3359, 72.

¹³⁷ Case C-209/10 *Post Danmark*, ECLI:EU:C:2012:172, 44.

¹³⁸ See Rousseva, *supra* n.39 at 337.

genuinely produced as efficiently as the dominant undertaking. A simple foreclosure analysis ignores the economic fact that not all competitors actually restrain a dominant undertaking from raising prices, and that predation can exclude companies not targeted by the practice. Thus such an approach would not necessarily promote competition, let alone consumer welfare, unless EU Institutions consider additional factors. The Court of Justice might have been directing the Danish Supreme Court to adopt a competitive effects analysis, which focuses on the status of the competitor threatened by Post Danmark's predation. Forbruger-Kontakt represented Post Danmark's closest competitor in the unaddressed mail delivery market.¹³⁹ The applicable legal principle then would be that price-cuts below ATC yet above incremental costs harm competition only if the competitor foreclosed restrained the dominant undertaking from raising prices more than any other.¹⁴⁰

Or perhaps the Court of Justice was decreeing an approach similar to the one adopted by the EU Commission when considering conditional rebates, as discussed in the Article 102 Guidance Paper.¹⁴¹ There it stated that if the effective price of the product after the rebate falls between the average avoidable costs (AAC) and long-run average incremental costs (LRAIC) of the dominant undertaking, then the Commission more closely will assess competitive effects.¹⁴² Yet the General Court in *Intel* stated that liability for offering conditional rebates did not hinge on conducting an as-efficient competitor test, as recommended by the Guidance Paper. Judges and competition authorities reserve the right to assess liability based simply on classifying the discount, specifically whether it qualifies as an 'exclusivity' rebate.¹⁴³ This per se rule involves determining competitive effects without examining market conditions, based on a general legal and economic finding that exclusivity rebates almost always produce anticompetitive effects. Under such a rule, the relevant foreclosure effect need not even preclude access to the market; it merely can make access more difficult.¹⁴⁴ The framework nevertheless allows the dominant undertaking to justify the exclusivity rebate by demonstrating objective necessity, or that it creates efficiencies that outweigh the potential foreclosure effect.¹⁴⁵

Single-product rebates are an inapposite analogy to predatory pricing. Setting aside both the prudence of commanding a per se test for conditional rebates, and whether such practices more closely resemble exclusive dealing or tying, predatory pricing operates differently both on competitors and on consumers. A conditional rebate relies on uncontested demand secured through market power to coerce additional purchases where competitors otherwise might challenge demand. The opportunity

¹³⁹ See Opinion of A.G. Mengozzi in Case C-209/10 *Post Danmark A/S* ECLI:EU:C:2011:342, 123.

¹⁴⁰ See generally Monti, *supra* n.17

¹⁴¹ A.82 Guidance Paper (2009/C 45/02), 41-44, 46 (*discussed* by: Lianos & Mateus, *supra* n.10 at 14).

¹⁴² *Id.*

¹⁴³ Case T-286/09 *Intel Corp. v. European Commission*, ECLI:EU:T:2014:547, 80-81.

¹⁴⁴ *Id.* at 88, 149; *cf.* Lianos & Mateus, *supra* n.10 at 23 (discussing low burden to prove consumer detriment in EU Microsoft tying case).

¹⁴⁵ *Id.* at 94.

cost of losing potentially massive discounts on necessary purchases can compel consumers to ignore equally adequate or better alternatives, thereby precluding merit competition. The practice harms consumers by practically eliminating their ability to select preferred products over the contestable portion of demand, while potentially sustaining or instituting higher prices once the practice excludes competitors.

By contrast, predatory pricing harms competitors purely by offering lower prices to consumers. The efficiency of competitors, whether they can match the discount, therefore becomes a relevant indicator as to whether the price-cut constitutes merit competition. As to consumers, while dominant undertakings may rely on a portion of inelastic demand to raise prices subsequently, the predatory price itself actually enhances efficiency and confers additional surplus on consumers. The subsequent inefficiency and redistribution of consumer surplus, in the form of higher prices that effectuate recoupment, produce anticompetitive effects. Competitors retain the option of matching the dominant undertaking's price-cut on a product-to-product basis, and consumers practically retain the option of buying the products of efficient competitors. The General Court in *Intel* recognized the conceptual difference between conditional rebates and predation, and explicitly advocated different legal treatment for the two practices.¹⁴⁶

A more likely reading of the holding in *Post Danmark* focuses on whether the exclusion harms competition and 'thereby' consumers' interests, which more closely resembles a recoupment or anticompetitive foreclosure analysis. This final reading looks to consumer welfare, rather than undistorted competition or short-term efficiency, as the primary objective of monopolization law. It further recognizes that a price-cut that excludes a dominant undertaking's closest competitor does not necessarily harm consumers, unless the dominant undertaking subsequently raises prices to a level that permits recovery of any initial loss sustained. Otherwise consumers benefit from overall lower prices. The exclusion of a dominant undertaking's closest competitor may support a recoupment finding, since insufficient competitive restraints no longer may exist to prevent recoupment. But that proposition further depends on the strength of both existing and potential competitors, the strength of entry barriers, and the extent of recoupment required. In the event, *Post Danmark*'s alleged predation did not exclude *Forbruger-Kontakt*

To determine the likelihood of recoupment or the possibility of anticompetitive effects in *Post Danmark*, the Court of Justice would need additional information following the original price-cut to *Coop*. The facts do not indicate at what price above ATC, if any, *Post Danmark* could have charged and still won *Coop*'s business, or the price *Forbruger-Kontakt* would have charged *Coop* had *Post Danmark* priced above ATC. From this 'but-for' price, the Court could have measured the extent that *Post Danmark* would have had to raise prices subsequently to recover the initial investment in below ATC price-cuts. The initial investment and corresponding subsequent recoupment amount probably was not substantial, given the existence of *Forbruger-Kontakt*, given that *Post Danmark* directed this 'predatory price' only at one customer, and given that

¹⁴⁶ *Id.* at 99.

the actual price charged to Coop exceeded Post Danmark's own AAC of delivering unaddressed mail, even if other fixed costs might have been substantial. The evidence further did not indicate the price level that Post Danmark charged Coop or other customers after initially winning Coop's business in the 2003 to 2004 period. Post Danmark only had three years to recoup, since Forbruger-Kontakt won back the business of Coop in 2007. Because Forbruger-Kontakt did not exit the market during the intervening years, it was unlikely that Post Danmark could have raised prices much from 2004 until 2007 without risking both the loss of Coop's business sooner, and the loss of operational efficiency tied to servicing that customer. The facts do not indicate explicitly the strength of competitors other than Forbruger-Kontakt operating in the unaddressed mail delivery market, though AG Mengozzi intimates that Forbruger-Kontakt might have been Post Danmark's 'only competitor.'¹⁴⁷ Neither do the facts discuss at any depth the strength of entry barriers protecting the unaddressed mail delivery market. Because Post Danmark utilized resources from the regular post market to deliver unaddressed mail, however, unless other methods to reduce costs were available to entrants, the government mandate in the regular mail market likely represented a formidable entry barrier to the unaddressed mail delivery market.¹⁴⁸

Although disputed, the existing evidence tends to suggest that a dominant undertaking offered attractive prices to an important customer of a competitor that in turn lowered the dominant undertaking's distribution costs. Post Danmark did not establish to the satisfaction of the Danish Competition Authority that lower overall costs translated into lower prices for other unaddressed mail customers. So long as Forbruger-Kontakt competed vigorously rather than colluding or staging competition — and because of asymmetrical cost functions due to Post Danmark's regular mail infrastructure, conditions were not ripe for tacit collusion¹⁴⁹ — Post Danmark had sufficient incentive to pass-on cost savings to other customers. Perhaps Post Danmark attempted to recoup in 2006 or 2007 by raising prices to Coop, which may have prompted Coop's return to Forbruger-Kontakt. Or perhaps Forbruger-Kontakt offered even lower prices to Coop after improving its own operational efficiency in the years subsequent to originally losing Coop's business. The exchange of competitive advances in this market at least casts doubt on the likelihood of recoupment in the years between 2004 and 2007. Absent higher prices that effectuated recoupment, the original price-cut below ATC could not have harmed consumers.

V. CONCLUSION

From both a general law and economics perspective and from the perspective of Neoclassical Price Theory, the elements discussed above by the *Post Danmark* Court amount to recoupment. The Court begins by providing an exception if the dominant undertaking can offer an objective justification. Several pro-competitive reasons could

¹⁴⁷ See Opinion of A.G. Mengozzi in Case C-209/10 *Post Danmark* ECLI:EU:C:2011:342, 123.

¹⁴⁸ Cf. Derek Ridyard, 'The As-Efficient Competitor Test in Pricing Abuse Cases', Presentation to the CLASF Workshop (1 May 2014) at 8, 11 (discussing incremental, avoidable, and fixed costs in *Post Danmark*) (on file with the author).

¹⁴⁹ See Nazzini, *supra* n.9 at 373, 382 (explaining how cost functions affect incentives to collude).

explain prices below ATC, such as sharp falls in demand or attempting to minimize losses, as when product lines go out of fashion or perishable goods remain unsold. Meeting competition also could justify such prices. In the absence of a pro-competitive explanation, the Court states that anticompetitive effects require an ‘actual or likely exclusionary effect’. This element demands either that the pricing below ATC eliminates rivals, or that it appears likely to do so. The lower the price-cut below ATC, the more likely it will exclude competitors and benefit consumers, but drastic price-cuts also make recoupment more difficult. Absent an actual or likely exclusionary effect, the dominant undertaking less likely would be able to raise prices sufficiently above cost to recoup the original investment in below-cost pricing.

Post Danmark states that the exclusion further must harm competition. Aside from lower product quality and less variety, and the extent of innovative capacity, higher prices constitute the most tangible and comprehensive evidence of damaged competition. Healthy competition will ensure that prices remain near the competitive level, as any price increase simply creates opportunities for rivals to gain market share. The Court ended by stating that the damage to competition must harm consumers’ interests. Healthy competition prevents the increase in price above the competitive level that recoupment requires. For a price-cut to damage competition and harm consumers, the exclusion that it causes must allow the dominant undertaking to raise prices above the level that would have existed absent the predation. Prices above that level additionally must extend high enough and last long enough to exceed the initial price-cuts that benefitted them. While consumers may not always object to higher prices if the enjoyment that they derive from a product and their willingness to pay for it still far exceed the list price, predation adds nothing to the inherent utility that a product provides, or to consumers’ willingness to pay for it. Predation can affect levels of consumer surplus. The recoupment phase of predation redirects surplus from consumers to producers and creates additional inefficiency if it bolsters market power. Full recoupment ensures a net negative effect on consumer surplus. Greater inefficiency and lower consumer surplus thus represent the anticompetitive effects of predatory pricing. Consumer harm in the targeted market principally depends on recoupment. If price increases fall short of recoupment, then consumers would have gained surplus from the scheme. The predation further would not have increased the dominant undertaking’s market power, since prices would have fallen beneath the level that would have existed absent the predation.