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Understanding Market Power

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Abstract

Antitrust laws are concerned with controlling market power. In the course of history, the development of antitrust systems of market power control in the US and in the European Union (EU) has not followed a straight path. Legal practice, political ideology, and developments in economics have shaped an overcomplicated and undertheorized body of doctrine in relation to market power. Substantial ambiguity surrounds the definition, proof, and prevention of market power that deserves to be subject to antitrust law. By comparison and historical analysis, the present study seeks to shed some clarity on the issue.

Keywords

Market power, dominance, monopoly, antitrust, law, economics

I. INTRODUCTION*

Antitrust laws are concerned with undue market power. In an economic conception of the law, antitrust rules of liability strike down anticompetitive business conduct or mergers that represent illegitimate market power strategies. Over the course of history, the antitrust literature has been an ebb and flow of commentary on antitrust laws' costly and ineffective checks against undue market power.¹

Part of the controversies owes to misconceptions about market power. Antitrust lawyers lack a common understanding of market power.² The result is a great deal of confusion about what antitrust laws achieve. At a time of concern towards rising levels of market power in the past decades, empirical evidence suggests that high prices have been localized in the United States (US), and that a stronger approach to antitrust law and economic regulation in the European Union (EU) has supplied welfare gains to consumers on the old continent.³ However, when European antitrust lawyers think about market power, they do not direct their attention to consumer prices. They think about corporate size and industrial concentration, see giant American firms, and deduct that they have a domestic market power problem.

Different concepts of market power additionally shape conflicting views about what antitrust laws can achieve. According to one school, excessive market power produces economic inefficiency in the form of missing output at positive rates of return as well as distributional harms through transfers from consumers to managers and owners of firms which are arguably wealthier.⁴ Consequently, antitrust law can be an uncostly instrument of choice to address economic inequality. Stronger antitrust rules and enforcement policies against weaker forms of market power are desirable. On the other side, a conception acknowledges that market power produces inefficiency as well as diverse distributional harms and benefits. But antitrust law should treat distributional effects as indifferent because they involve the need to resolve trade-offs for antitrust courts and agencies.⁵ Instead, the selection of a value choice criterion and the collection of data on relative income distributions among consumers, workers, and firm owners fall more clearly within the province of taxation, expenditure and transfer payment activities.⁶

The state of affairs never ceases to surprise economists. For them, market power is a term of art. However, judges and agencies are not economists. And statutory law, judicial interpretation, the constraints of antitrust practice, and the influence of ideology, combine to produce diverse market power conceptions. Besides, the market power story is not always uniformly told by

* I am grateful to Nicola Giocoli for very deep and helpful insights with Section II of this paper and to Sara Guidi for excellent research assistance. Sections II and III and IV of this paper will appear in different chapters of the Research Handbook on Abuse of Dominance and Monopolization, Pinar Akman, Konstantinos Stylianou, and Or Brook (Eds), Edward Elgar, 2022.

1 Eleanor M Fox, 'The Battle for the Soul of Antitrust' 75 California Law Review 917.

2 And antitrust lawyers do not realize this.

3 Thomas Philippon, *The Great Reversal: How America Gave Up on Free Markets* (Belknap Press 2019).

4 Lina M Khan and Sandeep Vaheesan, 'Market Power and Inequality: The Antitrust Counterrevolution and Its Discontents' (2017) 11 Harv L & Pol'y Rev 235.

5 Oliver E Williamson, 'Economies as an Antitrust Defense: The Welfare Tradeoffs' (1968) 58 The American Economic Review 18.

6 Joseph Farrell and Michael L Katz, 'The Economics of Welfare Standards in Antitrust' 37

economists. Subtle definitional differences that matter get overlooked in favour of ‘simplistic notions’,⁷ and all the more if lawyers are in the audience.

A comparative study can therefore help in shedding light on how US and EU antitrust laws control undue market power. And it can be a preliminary step towards the development of a unified and coherent theory of market power control in antitrust. The purpose of this article is to describe the systems of market power control adopted in both antitrust regimes. Section II presents the economic definition of market power. Sections III, VI, V and VI survey respectively the growth, system, conception, and proof of market power in US and EU antitrust law. Section VII concludes.⁸ This working paper is essentially concerned with the law applicable to single firm conduct and abuse of a dominant position, but it also covers coordinated conduct. The comparative law analysis is based on an assumption of functional equivalence between the various provisions of US and EU antitrust law.

II. ECONOMIC DEFINITION OF MARKET POWER

Market power is power over price (A).⁹ But nearly every economist accepts that a concept of market power as power over price is too simplistic. More technical definitions of market power are used in the economics literature (B). Economics has also reached a common understanding about classes of pricing phenomena that do not constitute market power problems (C).

A. Power over price

When there is market power, one (or more) firm(s) can raise prices above the cost of production. Customers that would benefit from buying units at the cost of production – including at an ordinary rate of return to the firm – are not served. And units that would be profitable to sell are not produced. Sales are missing, despite the fact that benefits to buyers exceed the cost to sellers. That outcome, called a ‘deadweight loss’ is inefficient from a social perspective. Some wealth, value, prosperity is lost.¹⁰ Buyers direct their expenditure to ‘less satisfactory purchases’ without this being compensated by gains to the seller with market power.¹¹ Sellers of less valuable commodities increase their output. But the aggregate size of the economic pie remains smaller than without market power, because the worth of these trades is inferior.¹² The cost, efficiency or innovation constraints bearing on firms with market power are also

7 Franklin M Fisher, ‘Diagnosing Monopoly’ (1927) 27 J. Reprints Antitrust L & Econ. 66 (noting ‘economists often use words which are in common use and whose everyday meanings are not in fact the same as their technical definition’ and adding: ‘the legal profession and the economist (not to mention competitors of the alleged monopolist) all have something different in mind’).

8 Only occasional reference is made to merger control.

9 Chad Syverson, ‘Macroeconomics and Market Power: Context, Implications, and Open Questions’ (2019) 33 Journal of Economic Perspectives 23, 25.

10 It cannot be observed in the GDP statistics.

11 Abba P Lerner, ‘The Concept of Monopoly and the Measurement of Monopoly Power’ (1934) 1 Review of Economic Studies 157.

12 What should happen is that the resources (ie the capital and labor) used in lower profit industries where purchasers now buy would be more optimally be reallocated to the high profit industry, to supply the output not furnished by the monopoly firm. For an exposition of this idea, see Arnold C Harberger, ‘Monopoly and Resource Allocation’ (1954) 44 The American Economic Review 77.

laxer. Market power, simply put, is inefficient. Harberger lumped all this under a concept of 'malallocative' or 'misallocation' effects of monopoly.¹³

Now, *why* do firms with market power leave profits from additional transactions on the table? Economics explain that when firms have no rivals,¹⁴ profit maximization leads monopoly firms to choose to reduce output as the privately efficient equilibrium.¹⁵ The logical implication is that deviations from competitive conditions engender market power exploitation. Private and social benefits are misaligned. The policy implication is that lost output constitutes a pecuniary externality from rational profit maximization that stands on equal footing with other market failures addressed by public intervention (or private ordering), like information asymmetries, free riding, missing markets, regulatory distortions, etc.¹⁶

B. Technical definitions of market power

In the economics literature, several technical definitions of market power exist. They arose in response to the Classical economists' initial understanding of monopoly and competition as Government privilege. These are reviewed in turn.¹⁷

1. Classical economics

Classical economists envisioned monopoly as a problem caused by government. Interference with markets through royal privileges, licences, patents, and tariffs was the main source monopoly power.¹⁸ The problems besetting free markets were different. The opposite of competition was not monopoly, but 'cooperation'.¹⁹ Concerted action amongst independent firms came first from agreements, congers, guilds, pools, trade associations, and trusts (sometimes supported by Governments).

More generally, classical economists understood competition as an 'active process of jockeying for advantage', that is the race to get the best deal on the market. Prices above costs

13 *ibid.*

14 And when they cannot price discriminate, that is charge each user with a distinct reservation value an individual price.

15 Note though, that another privately and socially efficient equilibrium would arise if the firm was able to perfectly price discriminate, and charge each consumer the maximum price he or she is willing to pay. Yet, the conditions for this to be possible are difficult to fulfil, and seldom encountered in practice.

16 For the concept of pecuniary externalities (an externality manifest in a change in prices), see Martin Shubik, 'Pecuniary Externalities: A Game Theoretic Analysis' (1971) 61 *American Economic Review* 713.

17 Estimation techniques are not discussed. Before estimating, one needs a definition, to know what is measured. Market power estimation techniques are a field of economics of their own, and involve statistical, accounting, and data techniques beyond the scope of this study.

18 During the 1890s, despite the passing of the Sherman Act, US economists showed overall little interest in pursuing the analysis of monopoly. Cournot's pivotal study on duopoly, although being published in 1838, would be recognized only posthumous, having had before only limited influence. The reasons are probably to be found in a mathematical approach which was uncommon at the time, together with the focus on output as a key variable, disregarded as unrealistic. See Irving Fisher, 'Cournot and Mathematical Economics' (1898) 12 *The Quarterly Journal of Economics* 119; JM d Bornier, 'The 'Cournot-Bertrand Debate': A Historical Perspective' (1992) 24 *History of Political Economy* 623; TAB Corley, 'Emergence of the Theory of Industrial Organization, 1890-1990' (1990) 19 *Business and Economic History* 83.

19 Mark Blaug, 'Is Competition Such a Good Thing? Static Efficiency versus Dynamic Efficiency' (2001) 19 *Review of Industrial Organization* 37. F A Walker, later first president of the American Economic Association, wrote in the main textbook of the time that '*Competition signifies the operation of individual self-interest among the buyers and sellers of any article in any market. It implies that each man is acting for himself solely, by himself solely, in exchange, to get the most he can from others, and to give the least he must himself*'. See Francis Amasa Walker, *Political Economy* (3rd edn, Macmillan 1982), 91-92.

were signs of lively competition, not its elimination. When high prices were observed, potential competition was deemed a disciplining force. There was no discussion of monopoly in terms of a falling demand curve, price above costs, or reduced output.

2. Falling demand curve

Augustin Cournot, a French (late classical) economist of the 19th century, was the first to offer a technical treatment of the issue. Cournot considered that market power stemmed from the falling demand curve. With help of the now familiar 'demand curve',²⁰ Cournot established that the units of a good that are demanded (D) are a *continuous* function of its price (p).²¹ The functional relation $F(p)$ between p to D is, 'in general' that a price increase will be followed by a corresponding decrease in demand.²²

So the law of demand means that a firm can sell more by lowering price. But how can this ever create market power or, in the popular saying, 'power over price'? The seminal demonstration of Cournot is counterintuitive, but compelling. Each firm, Cournot hypothesized, wants to maximize the 'total value', revenue or profit from its 'things' or 'labour'.²³ Now, when the demand curve is negatively sloped, it is *wrong* to assume that maximizing sales maximizes total value.²⁴ Of course, a firm can sell more units by lowering p. However, the theoretical price that maximizes sales is 0, and at $p=0$, the revenue to the firm is null. In addition, another property of the falling demand curve must be that an 'infinite' price also gives a demand of 0.²⁵ With this background, total value, revenue, or profit maximization requires a firm to pick a price point on the demand curve between zero and a high price.

Cournot established another continuous function $pF(p)$ that can be derived from the falling demand curve and that shows that revenue (not demand) tends to increase with p moving away from 0, until a point where it decreases.²⁶ This particular pricing point is the supply point that any firm, including a monopolist will select on the demand curve (see Table 1, for an example).

20 In Chapter IV of Antoine-Augustin Cournot, *Recherches Sur Les Principes Mathématiques de La Théorie Des Richesses* (Hachette 1838). See also Fisher (n 18).

21 Actually, Cournot talked more of a law of falling demand or a law of falling sales (débit), than of the falling demand curve; Cournot (n 20).

22 Cournot was careful to stress that the relationship needed not be proportional, and constant at all levels of prices; *ibid.*, para 23.

23 Cournot indistinctly uses terms like value, or profits; *ibid.*

24 Lawyers usually struggle to capture the depth of this idea, because they implicitly assume that to sell more, you need to lower price, and make the hidden assumption that profit maximization means selling more.

25 Cournot said that demand 'vanishes' when p becomes infinite. He remarked that a mineral water monopoly can sure impose an unrealistic price of 100 franc a litre. But soon enough, the mineral water monopolist will face a scarcity, if not a disappearance, of buyers due to the negative slope of the demand curve; Cournot (n 20), para 24-26. Robinson, in stricter terms, said once that infinite elasticity was an 'absurdity'; Joan Robinson, *The Economics of Imperfect Competition* (Springer 1969).

26 The total value function expresses the total value of quantities demanded and sold, which can be noted $pF(p)$.

Table 1 Example of supply point with falling demand

Price (p)	Units F(p)	Total Revenue pF(p)	Direction
0	10	0	↑
1	9	9	↑
2	8	16	↑
3	7	21	↑
4	6	24	↑
5	5	25	=
6	4	24	↓
7	3	21	↓
8	2	16	↓
9	1	9	↓
10	0	0	↓

So, in what sense is the falling demand curve a source of market power? There are at least two ways to see this. The first requires focussing on the differences between the demand curves faced by a monopolist and by a firm operating under perfect competition. In perfect competition, which Cournot also studied, the demand curve faced by a firm is horizontal, because there are multiple alternative sellers of goods. A high price is impossible because it means an absence of sales. By contrast, when the demand curve is falling, a high price means serving fewer customers, but more revenue than selling to all customers. Relative to perfect competition, the monopoly firm has more power over demand.

The second approach consists in reading the falling demand curve as an aggregate population of 'varied' consumers who enjoy distinct utility from consumption, itself dependent, said Cournot, upon 'customs', 'norms', and the 'scale' and 'distribution' of 'wealth' in society.²⁷ Simply put, the falling demand curve means that some customers are ready to pay higher prices than others.²⁸ The firm faces an environment different from one with a flat demand curve where not one customer will accept a price increase. The firm with a falling demand curve can extract a 'rent' by selling to some customers, but not to all, says Cournot. The magnitude of that rent will only depend on the 'nature' – the slope – of the falling demand curve.

A conventional economics presentation is to discuss the falling demand curve as a constraint on monopolists, not as a profit maximization opportunity.²⁹ Lawyers often struggle with this idea. But it has a kernel of truth. The proposition that a monopoly is constrained by demand makes sense if understood as the idea that a monopoly firm is 'only' constrained by demand, nothing else. The monopolist maximizes profit *given* the falling demand curve. This explains that Cournot, the founder of elementary monopoly theory, literally discussed the problem in

²⁷ Cournot (n 20) paras 21-22.

²⁸ And in which the firm must sell all the output that is demanded by all consumers at the lowest price point. The monopoly firm that faces a falling demand curve no longer needs to sell all the output demanded.

²⁹ It is truly a constraint, because the firm, even a monopoly cannot both select price and output, just one of them.

terms of how the monopoly firm ‘fixes’ a price (this relates to the contemporary concept of ‘price setter’). This is unlike consumers, who ‘bear’ the price set by the monopoly firm.³⁰

3. Price above (marginal) cost

Another definition characterizes market power as prices exceeding production costs. This definition is the work of neoclassical economists.³¹ Enlightened, but half-fed by Cournot’s positive theory of monopoly, neoclassical economists had just figured out that monopoly was endogenous.³² Something could be done to address the welfare effects of monopoly. Unfortunately, Cournot’s work was frugal in insights about how to rearrange markets in ways more beneficial to society. In addition, Cournot had described abstract functional relations, not algebraic ‘determinations’ that would have been more directly useful to practitioners. Neoclassical economists, who also understood that market power was a question of degree, needed a more operational procedure to estimate both its magnitude and welfare effects.³³ They attacked the problem of the ‘determination’ of the output of the individual firm head on.

Building on Cournot’s insight that the monopolist would proceed by ‘trial and error’, neoclassical economics formalized the process of setting price as a marginalist thought experiment.³⁴ Assuming profit maximization, the monopolist grows output and lowers prices up to the level where marginal revenue (‘MR’) equals marginal cost (‘MC’) (see Table 2 and Figure 1).³⁵ Put differently, the monopolist decides to produce an extra quantity of output if (and only if) this yields a revenue increment greater than the costs incurred to produce a marginal unit.³⁶ The neoclassical redux of market power emphasizes the role of two constraints, not just one, on the monopoly firm.

The first constraint is the falling demand curve, with a tweak.³⁷ The falling demand curve must be read as meaning that as served buyers experience less satisfaction through consumption, they derive marginally less benefit from extra units, and are thus willing to pay less for them. Importantly, MR is lower than price at each level of output, because all previous units sell at a lower price too.

30 A mainstream account of market power is that the monopoly firm ‘sets’ prices, while consumers ‘take’ prices. To avoid confusion here, it is worth recalling the contrast with Cournot’s own oligopoly model where firms set quantities.

31 This idea was already in Ricardo, a cornerstone of classical economics. See David Ricardo, *On the Principles of Political Economy and Taxation* (John Murray 1817).

32 At this regards, Giocoli writes: ‘Shockingly, American economists discovered that market power could well be the natural product of competitive markets and that, under certain conditions, the inevitable outcome of free competition was monopoly, i.e. the demise of competition itself’; Nicola Giocoli, ‘Free From What? Classical Competition and the Early Decades of American Antitrust’ (2021) 26 *New Political Economy* 86, 91.

33 Piero Sraffa, ‘The Laws of Returns under Competitive Conditions’ (1926) 36 *The Economic Journal* 535.

34 Cournot used the French word ‘tâtonnement’; Cournot (n 20).

35 This is not true for a firm in a competitive market, which sets price equal to marginal cost without considering marginal revenue. The firm in a competitive market is said to be a ‘price taker’, whereas, the firm in a monopoly market is said to be a ‘price setter’.

36 Here is an untechnical example to help the non-economist understand the monopolist’s thinking: do marginal returns on producing 10 additional pages in a long working paper compensate the marginal costs of writing them? In this example, marginal returns are reader’s interest, downloads or citations to the paper. In both the metaphor and the model, marginal returns tend to decrease when more pages are added to the paper, at least when the reader is a journalist or policy maker.

37 Lerner (n 11).

The second constraint is the existence of increasing (or constant) costs that, neoclassical economists believe, is a good empirical generalization of a firm's decisional context.³⁸ Costs increase with quantity because the labour force becomes less productive as the scale of production expands,³⁹ and the opportunity cost of leisure increases. There is a declining marginal product of labour. Most supply curves are drawn with an upward slope to show this. The implication is that to produce one more unit, a monopolist must spend more.⁴⁰

Now, the joint consideration of MR and MC allows a prediction about the level of output of the monopoly firm. The level of output lies at the intersection of MR and MC. It is an equilibrium point, because under this condition, the level of output will not be altered.⁴¹

Table 2 Monopoly Equilibrium

Price (p)	Units F(p)	Total Revenue pF(p)	Marginal Revenue (MR)	Marginal Cost (Mc)
0	10	0	0	4
1	9	9	9	3
2	8	16	7	2
3	7	21	5	1
4	6	24	3	2
5	5	25	1	3
6	4	24	(1)	4
7	3	21	(3)	5
8	2	16	(5)	6
9	1	9	(7)	7
10	0	0	(9)	8

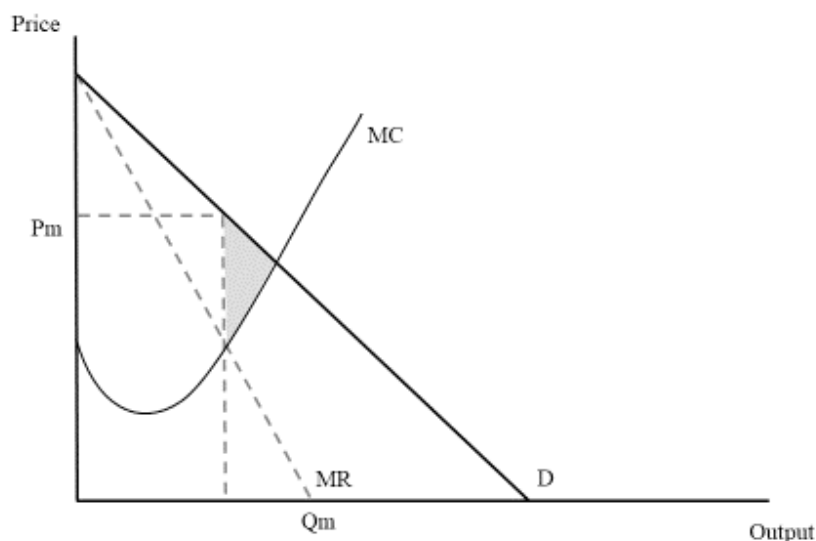
38 Robinson writes that 'in general, it may be supposed that in the short period marginal costs begin to rise at a fairly low level of output'; See Robinson (n 25) 50.

39 The earnings of a worker tend to be equal to the net product due to the additional labour of the relevant worker (assuming the marginal product of capital is constant).

40 Sraffa discussed the idea that 'each competing producer necessarily prices normally in circumstances of individual increasing costs'; see Sraffa (n 33) 543.

41 In Robinson's terms, there is equilibrium when output does not alter, when there is no tendency to contract or expand its output; Robinson (n 38) 57.

Figure 1 Monopoly Equilibrium



The neoclassical perspective on market power is 'artificial'.⁴² In real life, monopolists do not practice the marginalism.⁴³ The process requires unattainable precision in demand estimation.⁴⁴ Neoclassical economists have overcome this objection by advancing, quite reasonably, that firms behave 'as if', balancing ballpark estimations of marginal costs and receipts.

More fatal to the neoclassical perspective is its arbitrary baseline assumption of decreasing returns. Pietro Sraffa, in a 1926 paper, established a functional connection between cost and quantity, and showed that in a large dimension firm, a greater division of labour is possible, leading to increases in output. Sraffa appeared to lament that a consideration of decreasing costs 'was entirely abandoned, as it was seen incompatible with competitive conditions'.⁴⁵ The problem is that disregard of supply curves showing decreased costs risks overpredicting monopoly power.⁴⁶

Aware of this problem, neoclassical economics developed a 'more reasonable procedure' that consists in considering the 'actual conditions of the monopoly equilibrium' to study the

42 *ibid* 107.

43 What is meant here is that firms do not undertake the marginal computation that is described here, but may iteratively discover the profit maximizing price.

44 If they had this information, the monopoly firm would not set a single price, but instead price discriminate perfectly by charging each customer its own reservation price. Robinson, herself, said that 'even the most up-to-date businesses have only the vaguest notion of what kind of demand curves they have to deal with'; Robinson (n 38) 55.

45 Sraffa, who had noted that external economies in a growing industry also create increasing returns, remarked that the importance of 'external economies' was more and more emphasized - that is, of the advantage derived by individual producers from the growth not of their own individual undertakings, but of the industry in its aggregate; Sraffa (n 33) 537-538.

46 Cournot, who had considered different cost patterns (increasing, decreasing, or constant) in his Chapter V, maintained that the falling demand curve was the main explanatory factor of monopoly power because costs can go any direction; see Cournot (n 20). By contrast, Robinson, and many other neoclassicals based on the assumption that marginal costs would in general increase, considered that costs were at least equally important in determining output levels as the falling demand curve; see Robinson (n 25).

'excess of price over marginal cost'.⁴⁷ Lerner stated that 'the loss involved in monopoly can be seen in the divergence between price and this marginal cost'. His famous index,⁴⁸ which is a ratio of profit ($P - MC$) to price (p), gives algebraic expression to the 'degree of monopoly power'.⁴⁹

The definition of market power as price above marginal cost is equally questionable. Market power has nothing distinctive under the new definition. Firms in the real world ordinarily set price above marginal costs.⁵⁰ Pricing above costs is necessary to every economic activity, to cover for the cost of capital, insurance against loss, and managerial earnings.⁵¹ Acknowledging this constraint, Marshall conceded that only the revenues in excess of earnings necessary for economic activity would be the 'exceptional gains' that are 'the nature of monopoly'.⁵² But one may find very legitimate gains in the higher strata of profits reaped by monopoly firms. For accounting or fiscal reasons, firms may decide to 'price in' substantial expenses, rather than capitalizing them (like research and development and advertisement).

A response to this issue has consisted in focusing analysis on market power that is 'substantial', not trivial (an idea that has been embedded in antitrust law frameworks). Much literature states that market power exists only when deviations from competitive levels are 'important' or when a 'degree of monopoly power' is reached.⁵³ These qualifications are unhelpful. First, there is the question whether substantial market power is what is at play in differentiated goods markets where suppliers compete for demand at prices substantially higher than marginal costs. Even more fatal is the methodological objection. The economic literature seldom formulates an explicit threshold of substantiality.⁵⁴ Subjectivity, not the 'scientific' exactitude called for by Lerner, feeds back into the definition (and later estimation) of market power.

A major contribution of the neoclassical economics perspective lies in an understanding of monopoly power in terms of outcome (compared to the process view of the Classics). But short of a counterfactual, deviations from MC pricing are uninformative. And because it defies human ingenuity 'to compare the monopoly position with the competitive position',⁵⁵ neoclassical works often end up falling back on the idea that a firm's market power depends

47 Marshall, for example, said that artificial monopoly price is a price 'determined with little direct reference to cost of production'. He added 'but chiefly by a consideration of what the market will bear'; Alfred Marshall, *Principles of Economics* (8th edn Macmillan and Co 1920) 274.

48 Actually invented by Italian economist Luigi Amoroso; see Nicola Giocoli, 'Who Invented the Lerner Index? Luigi Amoroso, the Dominant Firm Model, and the Measurement of Market Power' (2012) 41 *Review of Industrial Organization* 181.

49 Lerner (n 11) 168.

50 Benjamin Klein, 'Market Power in Antitrust: Economic Analysis after Kodak' (1993) 3 *Supreme Court Economic Review* 43, 72.

51 Marshall (n 48) 396. Marshall added that the amount produced under monopoly is not necessarily less than the amount produced under competition or no monopoly, because often the monopoly will have economies of scale; see *ibid* 400-401.

52 Marshall (n 48) 396.

53 Kurt W Rothschild, 'The Degree of Monopoly' (1942) 9 *Economica* 24, 26.

54 Richard Schmalensee, 'Another Look at Market Power in Antitrust' (1982) 95 *Harvard Law Review* 1789.

55 Lerner (n 11) 476. See also, Jonathan B Baker and Timothy E Bresnahan, 'Empirical Methods of Identifying and Measuring Market Power' (1997) 27 *J Reprints Antitrust L & Econ* 743, 454: 'it is rarely if ever possible to know what the competitive equilibrium would look like'

on the elasticity of the demand, which itself is chiefly influenced by ‘the number of other firms selling the same commodity and the degree to which substitution is possible’.⁵⁶

4. Control of output

The growth in applied economics research in the 20th century has steered the economic literature towards a more actionable understanding of market power. The definition avoids the Charybdis of over-inclusiveness characterizing the ‘P above MC’ definition. It also escapes the Scylla of abstraction found in the classical definition.⁵⁷ Economics having no academy to standardize terminology, there is no official version of the definition. However, regularities encountered in the market power literature allow identification of some building blocks, and the construction of a mainstream definition that corresponds to the one that economists use when they speak about market power.

Broadly, the market power definition can be stated as follows: market power consists in one (or more) firm(s)’s freedom purposefully to influence price by control of market output and by benefit of constraints on industry supply.

Every element of the formulation matters. The definition starts with the firm, because the market power that matters (to the observer that accepts its endogeneity) lies in the firm. This eliminates from the concept deviations from competitive conditions caused by market, industry or economy wide events. This happens when the demand or supply curve shifts upwards due to a temporary shock. Trade wars, inflation or environmental hazards are common examples.⁵⁸ The definition also covers collective action by several firms.⁵⁹

The concept of freedom is important, because it insists on the idea that the market power firm’s choices are independent of other firms, unlike in oligopoly or perfect competition.

The emphasis on ‘purposefully’ should not be overlooked. As Hicks noted, a monopolist incurs ‘subjective costs of securing a close adaptation to the monopoly output’.⁶⁰ It is not inconceivable that the private costs of constructing a demand curve sufficiently close to reality outweigh the benefits of supracompetitive prices. Market power may not be exercised even under monopoly conditions. When market power is unused, it can be ignored.⁶¹ Moreover, in the case of a tax increase, a firm with monopoly power will only decrease output if it adopts a deliberate decision to pass on the surcharge to users, instead of booking it on its profits. A deliberate course of action by the firm is required.

Focus on purpose additionally allows filtering out market power that results from external events, accidents, luck, or legacy investments over which the firm has no choice. If the firm

56 Robinson (n 38) 50.

57 Marshall (n 47).

58 All firms, not just monopoly ones, see their supply curve shift upwards when there is inflation.

59 Marshall talks of monopoly through agreement ‘monopoly values, that can be traced with more or less distinctness in every case in which a single person or association of persons has the power of fixing either the amount of a commodity that is offered for sale or the price at which it is offered’; Marshall (n 48) 275.

60 Lerner (n 11) 170. This was already in Robinson too, who talked of ‘a maldistribution of resources as between different use’; Robinson (n 25).

61 Lerner (n 11) 170.

operates under exogenous constraints, no government policy can change firm behaviour in ways which are more beneficial to society without great expense and friction.

Economists discuss market power in terms of 'influence over price' to avoid using rigid concepts like 'setting' or 'raising' prices. The idea of price-setting wrongly suggests that the monopoly fixes a price. This is not the case in all industries where firms set quantities first, like airlines, hospitals, or steel. Transaction prices remain indeterminate until demand clears. Plus, 'influence' over price captures the economic case of the market power of buyers, which consists in price going down, not up. It also covers all cases in which a firm may find it strategically beneficial to lower its short-term price, whilst pursuing longer term monopoly profits.

The requirement of 'control of market output' is decisive. A firm can only confidently raise (or decrease) prices if it enjoys some control over other market participants' output.⁶² Otherwise, any output lost to a price increase will be replaced by an expansion of the output of other firms. Often, people define market power as pricing power by reduction of output, and assume that it is enough that the monopoly firm decreases its own output to raise prices above costs. The idea is intuitive. Reduced output increases the competition between buyers against scarcity. While this is a necessary condition, it is not a sufficient one. There is no scarcity if rival output can flood the market. Some 'control' of other firms' output is also required. A case in point is when a monopoly firm controls market output by securing preferential access to most or all of the input supply in the market. Or, when a monopolist invests in excess capacity to deter competitors from expanding.

Last, the idea of benefit of constraints on industry supply means that suppliers of other goods or services that are at best remote substitutes must be prevented from repositioning their resources in response to missing output. 'Benefit' denotes that the constraints are not imposed by the firm. It can be conjectured that the costs involved in active entry deterrence towards the vast population of suppliers of other products by far outweigh the gains from reduced output. Exogenous constraints must be present to give confidence to the firm that it is protected against potential competition from industry participants.

5. Conclusion

The robustness of the above definitions has come under heavy stress in the contemporary economic context. The falling demand curve or rising supply curve are both weak descriptors of the situation of firms in network industries where individual users register growing marginal benefits as the demand served by the network monopolist increases, as well as substantial economies of scale and scope due to decreasing or zero marginal costs. Network industries display, at least to some extent, an upward sloping demand curve and a downward sloping cost curve. More generally, the digital age of today features costs and demand conditions different from the agrarian or industrial age described above.

Faced with this issue, some antitrust scholars have advanced simpler definitions of monopoly power. One popular idea is to define it as the absence of alternatives, a bit like the classical economists' view of Government privileges. Another popular definition of monopoly is in terms of bigness. The definition has several variations. It alternatively treats large size, scale, share, breadth and/or growth of the business corporation as signs of monopoly. An influential example

⁶² Even more clearly, John Hicks wrote that if entry industry is free, it is 'impossible to earn more than normal profits'; see JR Hicks, 'Annual Survey of Economic Theory: The Theory of Monopoly' (1935) 3 *Econometrica* 1, 9. Before him, Lerner had talked of 'protection of competition from rest of supply'; Lerner (n 11) 482.

is Lina Khan's discussion of monopoly in terms of structural dominance, used to 'connote that the company controls a significant share of market activity in a sector'.⁶³

It might be questionable to use such a broad and amorphous concept of market power because it says nothing of its determinants. Bigness is a symptom, not a cause. How can effective policy against market power ever be designed absent a good understanding of its determinants?⁶⁴

C. Non-Market Power

Observable increases in prices or above cost prices do not necessarily implicate market power. Economics allows drawing a line between what constitutes usage of market power, and what does not.

1. Demand and supply shifts

Prices can increase as a result of upward shifts in the demand or supply curves. Such shifts of the demand curve occur when benefits from consumption increase. For example, heavy rainfalls raise the utility of umbrellas. Shifts of the supply curve arise when the marginal costs of production increase. For example, shortages of chipsets raise the manufacturing cost of personal computers.

Upward shifts in the demand or supply curve that raise prices do not necessarily involve exercise of market power. Economics captures this idea by distinguishing movements *of* the demand/supply curve from movements *along* the demand/supply curve. A monopolist will typically raise prices by selecting a higher price point on the demand curve. By contrast, a monopolist (and its competitors without market power) will both benefit from an upward shift in the demand curve.

A firm with market power can internalize a shift of the supply curve on its own profits, and limit price increases to buyers. This will not happen with firms operating under perfect competition. Firms in perfect competition make zero profits. Increases in costs must be passed on through a price increase. In this case, evidence of increased prices to consumers denote more a competition case than a market power one.

The cause of the change in demand and supply can be exogenous or endogenous to the firm. Endogenous changes are particularly confusing, because it is tempting to equate them with monopolistic practices. The issue of an endogenous shift in the supply curve can be left aside as an anomaly. By contrast, demand shifts can also come from a firm deciding to add a new line of complements to existing products (including those of rivals), thereby raising utility levels for the whole market, or from a decision to increase marketing expenditure to raise users' willingness to buy. Even more problematic is the case in which a firm decision will cause an uncertain risk of increased market power concomitant with a shift in the demand curve. Figure 2 below shows the effect of a horizontal merger in a concentrated industry that leads to (i) a probability of increased market power and (ii) a probabilistic innovation (new product) with high marginal benefits for users. Both effects can materialize cumulatively or alternatively.

63 Lina M Khan, 'Amazon's Antitrust Paradox' (2017) 126 *The Yale Law Journal* 710.

64 Unless, of course, direct regulation of prices is the preferred option.

The post-merger shift in the demand curve produces at least three times the value of the deadweight loss arising from a post-merger usage of monopoly power. If the examiner gets the market power prediction wrong, and post-merger prices are competitive (P_c), substantial value will be destroyed. Now, the picture below shows a movement of the demand curve that might be extreme in the real world. But it gives a sense of the general orders of magnitude. Even if we halved the shift in the demand curve, the gains in value would still remain above the monopoly losses. And it is only reasonable to use a shift of such magnitude, which corresponds to the small base of the deadweight loss triangle. In addition, if there are plausible cost efficiencies from mergers (see Figure 3), the gains are even higher.

Figure 2 Horizontal Merger in an Oligopoly

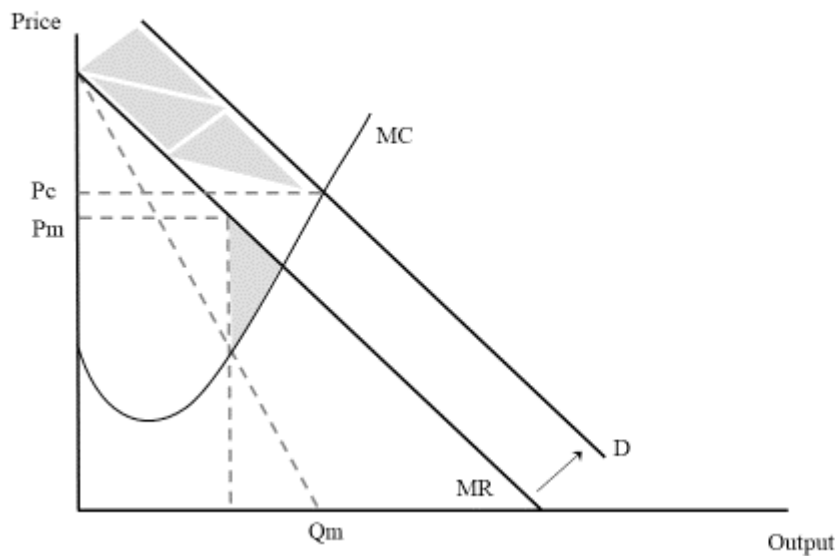
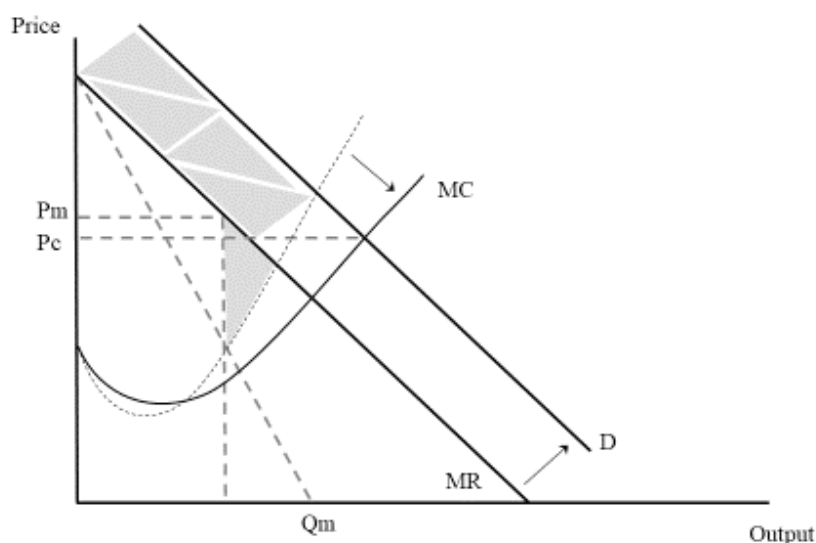


Figure 3 Horizontal Merger in an Oligopoly with Cost Efficiencies

2. Profits

Profits entail prices above costs. But economics does not treat profits as market power. Economists 'like' to 'count' the return that a firm gets from its own services as a 'cost' rather than as a profit.⁶⁵ The reason for this convention is that returns earned on capital invested (including capital goods, physical labour and human capital) as well as on other expenditure like research and development or marketing, constitute the 'normal profits' that reward competitive activity.⁶⁶ If profits are less than normal, 'firms will tend to leave the industry'.⁶⁷

Economists interested in market power are concerned about profits 'beyond' these.⁶⁸ Excess profits that add up to the normal rate of return cannot persist in the long term. They disappear in the short term with the entry or expansion of new firms. The short term is the time before which the firm earning profits can reinvest in new capacity (or the time during which its productive equipment, and costs, are fixed).⁶⁹ The long term is when the technique of production can be altered.⁷⁰

If long term profits are observed, an inference can be drawn that 'something blocks entry'.⁷¹ A restriction of entry becomes a condition to consider profits 'abnormal'. In some cases,

65 Hicks (n 62). In his famous 1954 paper, Harberger did just this, 'build[ing] a 10 per cent return into the cost curve'; Harberger (n 12) 78. Robinson also includes in the costs of production what she calls the 'minimum reward of the entrepreneur'; Robinson (n 38) 47.

66 Hicks (n 62).

67 Robinson (n 25).

68 Also known as 'exceptional' profits, supernormal profits or superprofits.

69 Robinson (n 38) 47. Robinson draws a difference between the short period, the quasi-long period, and the long period.

70 *ibid.* 48

71 Fisher (n 18). Also remember that Hicks writes: 'if entry in industry is free, it is impossible for firms 'to earn more than normal profits'; Hicks (n 62) 9.

'abnormal' profits are legal. For example, laws granting firms a legal monopoly lay down entry restrictions towards third parties. The point is to give the protected firm opportunities to earn rents beyond the normal rate of return and incentivize investments.

In other cases, firms will earn differential rates of return, and it will be wrong to consider that the firm earning the highest profits holds market power. Ricardian rents arise from productivity differences amongst the resources under the control of firms. They will not be dissipated by entry. A firm with better land, well-positioned estate, or a superior method of organizing production, of providing service or of establishing buyer confidence will produce at lower cost 'than can be obtained by newer or smaller firms'.⁷² Productivity differentials between energy generation between nuclear, coal, and renewables causes producers to display large discrepancies in profitability.⁷³ Sometimes, new entrants themselves provide services that command higher Ricardian rents, because old firms cannot expand as cost effectively to satisfy new demand as new entrants. For example, entrants in digital advertisement services might command higher profits than incumbent sellers of display, TV or classified advertising, because of higher productivity differentials, that is a higher sales conversion rate.⁷⁴

Economists' approach to profits has two practical implications. Accounting profits are poor proxies of market power. This is because accounting profits comprise the normal rates of returns required to induce firms to do business. In recent years, these 'imperfections' have not prevented a strand in the macroeconomic literature to use accounting data in order to produce evidence of increased markups across the US economy.⁷⁵

The second is that inferring market power from cost benchmarks might be attempted, but is totally fallacious. Joan Robinson laid out a very important, but subtle distinction.⁷⁶ Average costs determine whether a firm enters an industry and continues in business. Average costs do *not* determine price or output. Marginal costs do. This conception has led to the belief that market power can be observed by tracking deviations from marginal costs. The problem is not that it is impossible (as Robinson conceded) or wrong. It is that it is fallacious, because this convention sweeps away the necessary return that was embedded in the cost function, and that is the predicate for business activity without which competition would not exist. This return would be seen with an average cost definition.

3. Bargaining power

It is inappropriate to discuss all economic transactions at prices above costs in terms of market power. Buyers (and sellers) on markets happen to make bad deals. Paying too much for a good or service is not a market power problem. It is an income redistribution one. As long as the price a buyer pays remains below her marginal benefit, there is no inefficiency. No gains

72 Harold Demsetz 'Two Systems of Belief about Monopoly', in Harvey J Goldschmid, H Michael Mann, and J Fred Weston (eds) *Industrial Concentration: the New Learning* (Little Brown 1974).

73 See Roger G Noll, "Buyer Power' and Economic Policy' (2005) 72 Antitrust Law Journal 589. In particular, he takes the example of productivity differentials in natural gas extraction among wells and fields, where 'competitive pricing causes most producers to earn very large Ricardian rents, while the market price equals the average cost of the most costly well in production'.

74 Ricardian rents need not attract, nor discourage entry. A firm might enter or expand, on the view that some customers are ready to pay lower rents for a product of lower quality.

75 Syverson (n 9). Note that in the past, Harberger had done this himself, saying 'it is only reasonable to identify monopoly power with high rates of profit', Harberger (n 12) 84.

76 Robinson (n 38) 48.

from trade are lost. Economists look at the ‘excessive’ price paid to a seller as a transfer of resources. Economic theory supplies no consequential or moral reason to deem increases in sellers’ utility less socially worthy compared to increases in buyers’ utility.

Unequal prices or terms between parties to economic exchange occur when both sides do not have similar bargaining power. Differences in opportunity costs, and knowledge of these differences, create asymmetries in bargaining power. Bargaining power means that negotiating parties do not stand to lose equally if one walks away from the transaction.⁷⁷ In general, the party that least needs the agreement gets the majority of the proceeds.⁷⁸ This might have to do with information asymmetries, incomplete contracts, risk aversion, transaction costs, or asset specific investments.⁷⁹ These market imperfections, which can exist independently of market power, are determinant in outcomes often confused with market power, like holdup, consumer exploitation, lock-in and economic dependence.

Of course, the existence of competition decreases the bargaining power of the seller. However, existence of competition does not imply absence of bargaining power. For example, sellers of a competitive industry might lose less from a negotiation breakdown than their buyers who operate in a concentrated market. In the gasoline industry, competitive suppliers meet highly inelastic demand from airlines.⁸⁰ Absence of competition on the buying side can also bring prices closer to marginal costs.

The practical implication is that charging what the market can bear is not a market power problem. Conversely, even under conditions of monopoly, existence of supracompetitive prices charged on the units supplied is not a market power problem. It is just bargaining power exerted on the share of demand that is served. Those ‘inframarginal’ customers that pay units at a monopoly price do not divert expenditure to less satisfactory channels.⁸¹ The same is true of perfect price discrimination. When a monopoly seller can charge each consumer her maximum reservation price, all surplus is absorbed, but output is similar to the level that obtains under perfect competition.

III. GROWTH OF THE RELEVANCE OF MARKET POWER IN ANTITRUST

Most practitioners today consider that antitrust laws involve the containment of market power. This orientation begs the question of why and how control of market power came to be the policy behind antitrust laws, despite a conspicuous absence from the original statutes.

In the US and the EU, the growth of antitrust as a system of market power control is the result of a slow developmental process of law in action, shaped by judicial interpretation, administrative intervention, and private adjudication.⁸² The specific explanatory factors that drove the US and EU antitrust regimes to focus on market power remain, however, unclear.

⁷⁷ ‘The power to withhold from making a transaction is probably the most general content of the term ‘bargaining power’; John T Dunlop and Benjamin Higgins, ‘Bargaining Power’ and Market Structures’ (1942) 50 *Journal of Political Economy* 1, 2.

⁷⁸ Preston Mc Afee, *Competitive Solutions: The Strategist’s Toolkit* (Princeton University Press 2005).

⁷⁹ Benjamin Klein, Robert G Crawford and Armen A Alchian, ‘Vertical Integration, Appropriable Rents, and the Competitive Contracting Process’ (1978) 21 *The Journal of Law and Economics* 297.

⁸⁰ This example and the following are taken from Kenneth Hendricks, R Preston McAfee and Baxter Hall, ‘A Theory of Bilateral Oligopoly’ 51. concentration is often measured with the Hirschmann-Herfindahl Index (HHI)

⁸¹ Lerner (n 11) 158. Even though it might be objected that they enjoy less resources to purchase in other markets, where production is efficient. For instance, a customer of milk that pays a monopoly price enjoys less resources for pizza night.

⁸² Save under an extreme originalist view of antitrust law, there is nothing illegitimate to this process.

This section examines the issue of the reason for the growth of the relevance of market power in antitrust law in US (A) and EU (B), focusing on the US first because of its antecedence in passing antitrust legislation. The section then shows that both US and EU regimes present some similarity in terms of the system of market power containment that both have become (C).

A. US Law: Disciplining the Vague and Broad Language of the Sherman Act

The Sherman Act does not stipulate anything about market power. As George Stigler wrote, Congress could not adopt a market power standard when it passed the Sherman Act of 1890. The economics of market power were still in infancy.⁸³ The Sherman Act appears closer to classical economics. Section 1, which prohibits anticompetitive business coordination instructs firms subject to the Sherman Act to compete, not cooperate.⁸⁴ Section 2, which prohibits monopolization and attempts to monopolize,⁸⁵ outlaws business conduct that curtails existent competition or the opportunity for other firms to enter upon competition.⁸⁶ The words market power are also not in the Clayton Act (1914), the Robinson Patman Act (1936), or the Celler Kefauver Act (1950), despite substantial developments of the economic understanding of market power.⁸⁷

US jurisprudence read market power into US antitrust law. The vague language of the Sherman Act invited incessant questions about the substantive boundaries of the law. Did the reference to 'restraint of trade' require an interpretation of the Sherman Act under common law? Did the word 'commerce' cover combinations of labour and capital?⁸⁸

83 Section 1 of the Act prohibits anticompetitive business coordination in 'restraint of trade or commerce'. Section 2 more clearly prohibits 'monopolization' and 'attempts to monopolize'. Note that in a way, the order of the provisions of the Sherman Act is a possible reflection of the influence of classical economics.

84 Section 1 provides 'Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$10,000,000 if a corporation, or, if any other person, \$350,000, or by imprisonment not exceeding three years, or by both said punishments, in the discretion of the court.'

85 Section 2 provides 'Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$10,000,000 if a corporation, or, if any other person, \$350,000, or by imprisonment not exceeding three years, or by both said punishments, in the discretion of the court.'

86 William L Ransom, 'The Sherman Anti-Trust Act and the Newer Problems of Trade Restraint and Competition' (1939) 18 Proceedings of the Academy of Political Science 89.

87 Market power was not central to the gap filling effort of Congress when it adopted the FTC and Clayton Acts in 1914. This is surprising. The statutes were a response to the large merger waves of the 1890s. Their adoption marks the increased awareness of economists and policymakers to the fact that monopoly can be endogenous, not exogenous; see Giocoli (n 32). And yet, beyond broad references to competition and monopoly, the statutes far from constitute an unequivocal adoption of a market power rationale. Directed against price discrimination, tying practices, interlocking directorates and acquisitions, the statutes use broad clauses that condition liability to a '*substantial lessening of competition*' or '*to tend to create a monopoly*'. When the Robinson Patman Act of 1936 and the Celler Kefauver anti-merger Act of 1950 were adopted, the economics of market power were well in place. Yet again, the plain congressional purpose was not to reflect progress in economic theory. By outlawing price discrimination, the Robinson-Patman amendments sought to achieve distributional if not clearly protectionist purposes. The act aims at reducing competitive injury to small firms in their competition against larger buyers, even if this came at the costs of rising average price levels in the economy. The goal of the Celler Kefauver Act is even more mundane. Congress primarily sought to plug a loophole by bringing asset acquisition within the scope of the Clayton Act. The Celler Kefauver Act is a technical modification that sought to address the issue of firms reorganizing into corporation with a purpose of evading the provisions of the antitrust laws that only caught stock acquisitions.

88 *Loewe v Lawlor*, 208 US 274 (1908).

Were manufacture⁸⁹ and advertisement subject to the Sherman Act?⁹⁰ The Supreme Court was required to develop a construction of the Sherman Act.

Early decisions tackled the problem with a rigid view of the proper application of the law. In one of its first opinions, the Court in *Knight* disarmed the Sherman Act on the basis of an extreme reading. The Court affirmed that the Sherman Act's reference to 'commerce' was meant to exclude all manufacture from its scope.⁹¹ In other cases, textualism led to formulating wide *per se* rules of illegality. In *Trans Missouri Freight Association* and *Northern Securities*, the Court read the word 'every' in the Sherman Act as outlawing 'all' transactions between competitors regardless of their purpose⁹² or effect.⁹³ Some cases started to express doubts about the sustainability of antitrust textualism. In *US v Hopkins*, the Court noted that 'there would scarcely be an agreement or contract among business men that could not be said to have, indirectly or remotely, some bearing upon interstate commerce, and possibly to restrain it'.⁹⁴

In this context, a market power standard became a useful concept to develop a workable construction of the Sherman Act. The genesis of market power tracks the development of the rule of reason. Contingent with the Court's methodological insistence on the exercise of 'judgement' through a 'standard or reason' in the application of Section 1 and 2 of the Sherman Act,⁹⁵ a view that 'realities must dominate the judgment' supplied an intellectual environment hospitable to a growing focus on market power.⁹⁶

The judicial introduction of a market power concept in antitrust followed a punctured developmental path. The *Socony Vacuum* case of 1940 is where the 'monopoly power' formula was used for the first time.⁹⁷ In the following years, the term market power appeared again

89 *United States v E C Knight Co* 156 US 1 (1895). In *US v Knight*, American Sugar Refining Company's acquisition of monopoly in sugar refineries was deemed outside of the Sherman Act because it concerned manufacture, not commerce. The Court held that '[c]ommerce succeeds to manufacture, and is not a part of it'; *ibid* 12. The case will be later qualified in *Addyston Pipe*, which held that what matters is not that manufacture is not commerce, but that there is an incidence of manufacture on trade; *Addyston Pipe & Steel Co v United States* 175 US 211 (1899).

90 *Blumenstock Bros v Curtis Pub Co* 252 US 436 (1920).

91 See n 89.

92 *US v Trans-Missouri Freight Association* 166 US 290 (1897). The Court stated that the Sherman Act renders illegal 'all agreements' which are in restraint of trade or commerce, and Section 1 liability 'can be maintained without proof of the allegation that the agreement was entered into for the purpose of restraining trade or commerce or for maintaining rates above what was reasonable. The necessary effect of the agreement is to restrain trade or commerce, no matter what the intent was on the part of those who signed it'; *ibid* 342.

93 *Northern Securities Co v United States* 193 US 197 (1904). According to the Court, the Sherman Act 'is not limited to restraints of interstate and international trade or commerce that are unreasonable in their nature, but embraces all direct restraints imposed by any combination, conspiracy or monopoly upon such trade or commerce'; *ibid* 331. The *Northern Securities* opinion works on an incipency rationale, that holds the Sherman Act applicable as soon as it is proven that the conduct 'by its necessary operation' 'tends to restrain interstate or international trade or commerce or tends to create a monopoly'; *ibid* 332.

94 *Hopkins v United States* 171 US 578 (1898).

95 See *Standard Oil Co v United States* 221 US 1 (1910). The Court affirms: '[...] it inevitably follows that the provision necessarily called for the exercise of judgment which required that some standard should be resorted to for the purpose of determining whether the prohibitions contained in the statute had or had not in any given case been violated. Thus, not specifying but indubitably contemplating and requiring a standard, it follows that it was intended that the standard of reason which had been applied at the common law'; *ibid* 60.

96 *Appalachian Coals, Inc v U S* 288 US 344 (1933).

97 *US v Socony-Vacuum Oil Co* 310 US 150 (1940). The Court cites to *US v Patten* 226 US 525 (1913) where the issue was essentially that of cornering the market. No trace of the expression 'monopoly power'.

in *Griffith*⁹⁸ and in Justice Douglas' dissent in *Columbia Steel*.⁹⁹ In effect, however, none of these opinions can be considered to have introduced an analytical focus on 'market power' or 'monopoly power' in antitrust jurisprudence. The essential significance of *Socony Vacuum* is to declare a *per se* prohibition rule against any coordinated practice that remotely interferes with market prices.¹⁰⁰ Neither does *Griffith* constitute a straight incorporation of market power economics. The case is representative of a trend in the case law that considers that limitation on corporate size, not economic power, was also the policy behind the antitrust law.

That said, strong signs exist that a market power conception already lived in the case law. In early interpretations to the law of monopolization under Section 2, the Court developed – perhaps unconsciously – an understanding of market power that shares blood with its modern economic interpretation. In several old cases involving Section 2 allegations, the Court considered control of output in addition to power over price.¹⁰¹ An elaborate market power mind-set, for example, appeared in *Reading*, where the Government challenged the corporate reorganisation into a holding of competing railroads' involved in anthracite carriage.¹⁰² Reviewing the evidence, the Court hinted that a base of power over output determined consumer prices in stating that '[t]his board of directors, obviously, thus acquired power: to increase or decrease the output of coal from very extensive mines, the supply of it in the market, and the cost of it to the consumer'.¹⁰³

Even more clearly, *US Steel* expressed a similar market power conception.¹⁰⁴ Acknowledging that *US Steel* constituted a large corporation, Justice Mc Kenna wrote that it was '... greater in size and productive power than any of its competitors, equal or nearly equal to them all, but its power over prices was not and is not commensurate with its power to produce'.¹⁰⁵ This passage might be superficially read as a suggestion that power over price, not power over output, has determinant weight in a finding of liability. But a more solid inference to be drawn from the case is that the Court only regarded as unlawful a situation of power over price arising from control of output. To dismiss the price evidence brought by the Government, the Court remarked that *US Steel* had sought to cooperate with competitors, a telling sign that it did not hold control over output. And it observed that competitors had grown either against or in consequence of the competition. Together with evidence that competitors had followed *US Steel's* price leadership, the best inference that could be drawn from the record, and which the Court correctly drew, is that other factors were probably conducive to industry wide patterns of similar price movements.¹⁰⁶ Short of control over output, the case was just a charge against corporate bigness.

98 *United States v Griffith* 334 US 100 (1948).

99 *United States v Steel Corp* 251 US 417 (1920). Mr Justice Douglas noted that the case 'reveals the way of growth of monopoly power-the precise phenomenon at which the Sherman Act was aimed'; *ibid* 446.

100 The Court stated that the 'thrust of the rule is deeper and reaches more than monopoly power'; *Socony-Vacuum* (n 97) 221.

101 The point here is not about the notion of market power, but about an effort to think in economic terms.

102 *United States v Reading Co* 253 US 26 (1920).

103 *ibid* 48.

104 *US Steel* (n 98).

105 *ibid* 445.

106 The Court noted: 'competition affects prices; but it is only one among other influences and does not, more than they, register itself in definite and legible effect' (251 U.S. 449). Later, in *International Harvester*, the Court declared that 'to follow the prices of another manufacturer, does not establish any suppression of competition or show any sinister domination'. See *United States v Int. Harvester Co.* 274 U.S. 693 (1927).

Last, *Standard Oil* came very close to an economic description of the welfare harms of market power. The Court summarized as follows the three 'evils' that undergirds Section 2's prohibition of monopoly creation: '1. the power ... to fix the price; 2. The power which it engendered of enabling a limitation on production; and, 3. The danger of deterioration in quality of the monopolized article which it was deemed was the inevitable resultant of the monopolistic control over its production and sale'.¹⁰⁷ The fundamental importance of this *dictum* lies in the causal relation drawn by the Court between price increases, output reductions ('engendered'), and weakened quality ('resultant'). An economist would be prompt to notice its descriptive correspondence with the market power theory.

A modern conception of monopoly power has not been scrupulously followed in the case law. Several times, before and after *Reading* and *US Steel*, the Court adopted a more primitive understanding of market power as price control.¹⁰⁸ Commenting on *Cellophane*,¹⁰⁹ Hay stressed the basic problem posed by judicial market power definitions that discuss market power in terms of power over price 'and'/'or' output.¹¹⁰ Moreover, other opinions appeared wholly ignorant of the profit maximizing mechanics of market power, as when the *Appalachian Coal* Court stated that 'the true test of monopoly of a market or restraint of trade is not whether in some mysterious way the sales of the combination may affect prices'.¹¹¹

The fluctuations in the Court's understanding of market power remain a by-product of the US legal system.¹¹² In a manner typical of the common law, the development of a market power concept followed a 'gradual process of judicial inclusion and exclusion'.¹¹³ Jurisprudential elaboration of a market power conception did not follow a straight line. And yet, the abovementioned cases constitute pieces of anecdotal evidence of the incremental inclusion of market power thinking in antitrust cases.

In addition, analysis of judicial exclusions from antitrust coverage also supports the thesis that the US courts brought about a system of market power control. The first of such judicial exclusions is the repudiation of doctrine seeking to attribute political content to antitrust law,

¹⁰⁷ *Standard Oil Co. of New Jersey v United States* 221 U.S. 1 (1911), 52.

¹⁰⁸ In *Geddes v Anaconda Mining Co.* 254 U.S. 590 (1921) the Court states: 'It is obviously impossible to say that these fluctuating prices prove monopolistic control of the price of copper by the defendants.' (254 U.S. 595); In *United States v Gen. Elec. Co* 272 U.S. 476 (1926) it is affirmed: 'We do not question that in a suit under the Anti-Trust Act the circumstance that the combination effected secures domination of so large a part of the business affected as to control prices is usually most important in proof of a monopoly violating the Act' (272 U.S. 485); In *United Leather Workers v Herkert*, 265 U.S. 457 (1924): 'It is only when the intent or the necessary effect upon such commerce in the article is to enable those preventing the manufacture to monopolize its supply or control its price, or discriminate as between its would-be purchasers, that the unlawful interference with its manufacture can be said directly to burden interstate commerce' (265 U.S. 458); Lastly, in *United States v Trenton Potteries* 273 U.S. 392 (1927) the Court writes: 'the Sherman Law and the judicial decisions interpreting it are based upon the assumption that the public interest is best protected from the evils of monopoly and price control by the maintenance of competition' (273 U.S. 397).

¹⁰⁹ *United States v Du Pont & Co.* 351 U.S. 377 (1956).

¹¹⁰ For an example, see *Standard Oil Co. v United States* (n 95): '... primary defendants and their licensees neither individually nor collectively controlled the market price or supply of any gasoline moving in interstate commerce' (283 U.S. 178). Some cases talk of power over price 'or' power to exclude.

¹¹¹ *Appalachian Coals, Inc. v U. S.* (n 96).

¹¹² A question that will be examined in Section IV.

¹¹³ *Davidson v New Orleans* 96 U.S. 97, 104 (1877).

and an explicit construction of the Sherman Act as an instrument of economic policy.¹¹⁴ The Supreme Court's Opinion in *Northern Securities* in 1903 states early and clearly that the Sherman Act addresses an 'economic question', that is, how to optimize 'public convenience' and 'general welfare'. It held that Congress considered them 'best subserved when the natural laws of competition are left undisturbed'.¹¹⁵ Louis Kaplow has described the robustness of an economic view of antitrust.¹¹⁶ It has resisted to swings in judicial or political attitudes towards more or less enforcement.¹¹⁷ Compare, for example, the conservative *Trinko* decision, which states that Section 2 of the Sherman Act protects against 'extraordinary agglomerations of economic power' with the progressive Opinion in *Philadelphia Nat'l Bank*, where the Court held that the assessment of social and economic trade-offs like contribution of banking mergers to local economic development involved 'value choice ...beyond the ordinary limits of judicial competence'.¹¹⁸ Both represent an economic conception of the law. Even cases like *Brown Shoe* which has become poster child of antitrust interventionism considered a merger's probable effect on the 'economic way of life sought to be preserved by Congress'.¹¹⁹ Over the long arc of history, there is at best anecdotal judicial support to a conception of the Sherman Act as a prophylactic against power tending towards private government.¹²⁰

Still. With just an exclusion of political considerations from antitrust cases, the Sherman Act might have nonetheless developed into another system of control of economic power, like consumer protection. Two additional exclusions further directed US antitrust towards a market power control system. One has been the abandonment of corporate size as a parallel determinant of liability. US antitrust law has long worked towards addressing what the *American Can Co* discussed as a dual problem of 'size and power'. Today, the ambiguities of cases that sought to strike against the aggregation of capital within a single firm, and at the exclusion of small businesses have been removed.¹²¹ Bigness, to use the label of Mr Justice Douglas, does

114 Robert Pitofsky, 'The Political Content of Antitrust' (1979) 127 *University of Pennsylvania Law Review* 1051. See *LePage's Inc. v 3M* 324 F.3d 141 (3d Cir. 2003) 169: 'Section 2, the provision of the antitrust laws designed to curb the excesses of monopolists and near-monopolists, is the equivalent in our economic sphere of the guarantees of free and unhampered elections in the political sphere'; 'Just as democracy can thrive only in a free political system unhindered by outside forces, so also can market capitalism survive only if those with market power are kept in check. That is the goal of the antitrust laws'.

115 *Northern Securities Co. v United States* (n 92). See also *Dr. Miles Medical Co. v Park & Sons Co.* 374 U.S. 321 (1963) on public welfare.

116 Louis Kaplow, 'Antitrust, Law & Economics, and the Courts' (1987) 50 *Law and Contemporary Problems* 181.

117 Similarly, since the early days, lower courts repeatedly read the policy behind the statute to correspond to a concern towards types of behaviour detrimental to the 'consuming public'. See *U.S. v American Can Co.* D.C., 230 F. 859 (1916); *Conwood Company v United States Tobacco Company* 290 F.3d 768 (2002).

118 *U.S. v Philadelphia Nat. Bank* 374 U.S. 321 (1963). Note, however, *Wilder MFG. Co. v Corn Products Co.* 236 U.S. 165 (1915), stating that the Sherman Act provides the 'most comprehensive way' to prohibit combinations, is founded on 'broad conceptions of public policy', and provides "amplest discretion in [the] courts'.

119 In *Brown Shoe Co. v U.S.* 370 U.S. 294 (1962) the Court adds: 'Congress was desirous of preventing the formation of further oligopolies with their attendant adverse effects upon local control of industry and upon small business. Where an industry was composed of numerous independent units, Congress appeared anxious to preserve this structure' (370 U.S. 333).

120 *Fashion Guild v Trade Com'n* 312 U.S. 457 (1941). See also Mr Justice Douglas' dissent in *United States v Steel Corp.* (n 99), affirming that: 'The philosophy of the Sherman Act is that it should not exist. ' For all power tends to develop into a government in itself' (334 U.S. 536).

121 A desire to protect small businesses has been behind several antimerger decisions adopted in the 1960s in *Brown Shoe* (n 119), *U.S. v Phil Nat'l Bank* 374 U.S. 321 (1963), *U.S. v Pabst Brewing* 384 U.S. 546 (1966), and *U.S. v Von's Grocery* 384 U.S. 270 (1966). In *Von's Grocery*, the Court paid no attention to market power, which led Mr Justice Stewart to write in his dissent: 'There is simply no evidence in the record, and the Court makes no attempt to demonstrate, that the increment in

not constitute an offence against the law.¹²² The Court now refuses to link corporate size and monopoly power.¹²³ In *General Dynamics*, the Court drew an important distinction. It deemed the ‘company’s size when viewed as a producer’ irrelevant to merger analysis, compared to its strength or weakness ‘as a competitor’.¹²⁴

The other exclusion came when the Court said that the Sherman Act was not concerned with bad bargains. In *Eastern States Lumber Ass’n*, the Court declared that the Sherman Act was not intended to reach ‘normal and usual contracts incident’.¹²⁵ In another case, the Court stated that the Act was ‘not concerned with the interest of the parties but with the interest of the public’.¹²⁶ Opportunism like deception,¹²⁷ or even coercion, do not render a contract in violation of antitrust law.¹²⁸ Admittedly, the implementation of this idea in cases might have been controversial. In a dissent in *Kodak*, Justice Scalia criticized the conflation of the ‘circumstantial power’ held by Original Equipment Manufacturers in aftermarkets for parts and services with true ‘market power’.¹²⁹ Yet, what is significant are the clear *dicta* of the Court that place distributional economic policy issues at the outer edge of the Sherman Act.

B. EU Law: Implementing the Economic Directions and Instructions of Treaty Law

European antitrust law has also grown into a system of market power containment. But it is less straightforward than its US counterpart. Like Section 1 and 2 of the Sherman Act, Article 101 and 102 of the Treaty on the Functioning of the European Union (‘TFEU’) do not refer to ‘market power’. A similar absence of the terms ‘market power’ characterizes the EU merger regulation (‘EUMR’). But what allows one to say that EU law is less expressly concerned with market power, is that compared to US case law, usage of the concept by EU courts has been spasmodic. The Court of Justice (‘CoJ’) never uses the term ‘market power’ (let alone monopoly power) in the operative or dispositive parts of its decisions.¹³⁰ The General Court (‘GC’) speaks more often of market power. However, one can count jurisprudential references to market power on the fingers of one hand. More importantly, market power is essentially discussed in

market share obtained by the combined stores can be equated with an increase in the market power of the combined firm’ (384 U.S. 297).

122 See Justice Douglas dissent in *United States v. Steel Corp.* (n 99): ‘We have here the problem of bigness’ (334 U.S. 536).

123 See *United States v Griffith* 334 U.S. 100 (1948): ‘It was said in *United States v. United States Steel Corp.* that mere size is not outlawed by § 2. But size is of course an earmark of monopoly power’ (334 U.S. 100).

124 *United States v General Dynamics Corp.* 415 U.S. 486 (1974).

125 *Eastern States Lumber Ass’n v United States* 234 U.S. 600 (1914).

126 *United States v Del., Lack., & West R.R.* 238 U.S. 516 (1915).

127 In *Federal Trade Comm. v Gratz* 253 U.S. 421 (1920), the Court draws a distinction between practices opposed to good morals (deception) and public policy (monopoly), with only the later falling within the Sherman Act.

128 In *United States v United Shoe Mach. Co.* 247 U.S. 32 (1918) the Courts affirms: ‘the leases are simply bargains, not different from others, moved upon calculated considerations, and, whether provident or improvident, are entitled nevertheless to the sanctions of the [contract] law’ (247 U.S. 66).

129 504 U.S. 451 (1992). Note that the *Kodak* dissent is very close to the dissent in *Interstate Circuit*, where the Mr Justice Roberts sought to explain that copyright does not create monopoly. See *Interstate Circuit, Inc. v. United States* 306 U.S. 208 (1939): ‘The monopoly, so called, amounts to no more than the attachment to the work of an author or composer or producer of motion pictures of the same rights as inhere in other property under the common law’ (306 U.S. 237).

130 There is not a single judgment of the CoJ where the Court discusses monopoly power. Opinions that discuss market power do this more as an incident of procedure than anything. That is when the decision under review, or the complaint lodged against it, embodied a reference to it.

merger cases. Judgments rendered under Article 101 TFEU and even more under Article 102 TFEU feature scant references to market power. In European law, the words 'market power' appear predominantly in conduct specific antitrust legislation, sectoral regulation, and in policy documents.

Absence of emphasis on market power in EU case law invites two questions and an observation. The questions are: is it the result of a deliberate judicial policy? And does EU law embed an alternative concept that could plausibly motivate the judicial policy? The observation is that one could claim that a focus on judicial language is uninformative. What counts in assessing whether the EU courts conceive competition rules as a system of market power control is substance, not form.

The observation can be addressed quickly. Market power is a term of art. The EU Commission and the European Court's own Advocates General mobilize market power in competition cases. There is every reason to assume that the Court knows of market power as an economic concept. In fact, multiple economic concepts, like barriers to entry, economies of scale, or oligopoly were introduced into the case law through adjudication. Yet, not market power.

What is decisive for a comparative law analysis, then, is to consider the reasons behind the European courts' reluctance to adopt a market power concept. In other words, it is interesting to ask why the EU courts did not read market power into the law.

When comparing the reception of market power in European and US antitrust law, proper attention should be given to their initial positions. The Treaty wording is more economical than the Sherman Act. The rules expressly strike at distortions of 'competition'. Europeans talk of restrictions of competition by 'object' or 'effect'. Amongst other things, the Treaty provisions also specify impacts on 'price', 'supply', 'technical progress' or 'investment' as points of reference for the evaluation of business conduct. This is very different from the Sherman Act which, as Justice Holmes observed in a dissent in *Northern Securities*, 'says nothing about competition'.¹³¹ There is no discussion that the textual basis of European competition law is economic. In turn, the relatively clearer economic content of EU competition might have meant that the EU Courts did not need an explicit 'market power' concept to discipline the application of the law.¹³²

Besides, the Treaty specifies a market power indicator. Article 102 TFEU expressly directs agencies and courts to look at one or more firms' 'dominant position'. Similarly, the first versions of the EU Merger Regulation placed the focus of analysis on a transaction's contribution to the creation or strengthening of a 'dominant position'. And since the end 1990s, a large body of statutory legislation and policy instruments related to the application of Articles 101 and 102 TFEU works with market share rules and presumptions of liability and immunity.

There are several ways to think about this. On the one hand, the specific language of European law can be said to reflect the lawmakers' understanding of the market power problem, and an intention to deal with it in a practical manner. On the other hand, the emphasis on market position, not power, might be interpreted as a sign of a more structuralist orientation of the lawmakers, consistent with both European ordoliberal philosophy as well as the dominant economics of the time (in particular, the Structure Conduct Performance paradigm of Mason

131 See n 93, 193.

132 Of course, they needed assistance to develop an interpretation of the law. But there was less possible variation than with US text law.

and Bain).¹³³ Whichever interpretation is right, the point again is this: having found in the Treaty a clear instruction from the lawmakers, the Court did not need a 'market power' mindset to make sense of the law.

One last divergence concerns the slow growth of market power in European law. In US law, market power is mainstream since the 1950s. European law did not see its first abuse of dominance case before 1970.¹³⁴ It is not until the 1990s that the European law started to habitually discuss market power in antitrust,¹³⁵ merger,¹³⁶ and regulatory policy.¹³⁷ In 2009, the EU Commission adopted a Guidance on Article 102 TFEU that eventually contained a full section entitled 'Market Power'. Now, a critical eye will object that it also took 60 years for US law to adopt a market power concept. But context matters. It is plainly wrong to assume that US and EU law emerged in an identical intellectual context. The historical record is straight. American antitrust experts helped draft the EU competition rules in the 1950s. Moreover, at the time of enactment of the EU Treaties, the economics of market power was well in place. It is safe to conjecture that the first actors of European antitrust policy were familiar with market power. While recognizing the possibility of being misled, it seems appropriate to regard these facts as indicative that European law and policymaking did not initially take the market power road as the result of a deliberate choice.

The slow progression of market power in European law has also certainly been influenced by a different conception of the role of competition law. Recall that the Treaty competition clauses are instruments of a regional economic integration programme. Further, in the 1950s and 1960s, the prevailing wisdom was that European firms lacked economies of scale and scope. A strong preference was expressed towards policies that favour industry consolidation and efficient restructuring.¹³⁸ The Treaty manifests this pro-concentration philosophy quite clearly. A choice appears to have been made in favour of placing limited strictures on corporate growth by alliance, acquisition or organic growth. Article 101 TFEU tolerates an exception to the cartel prohibition on account of economic advantages, improvements in production or distribution, or technological advancement. Provided it does not lead to a complete monopoly, formation of market power by agreement may be deemed preferable to free competition. What is more, the Treaty expresses an equivalent, if not greater, degree of leniency towards organic growth.

133 Edward S Mason, 'Price and Production Policies of Large-Scale Enterprise' (1939) 29 *The American Economic Review* 61; Joe S Bain, 'Relation of Profit Rate to Industry Concentration: American Manufacturing, 1936-1940' (1951) 65 *The Quarterly Journal of Economics* 293; Joe S Bain, 'Economies of Scale, Concentration, and the Condition of Entry in Twenty Manufacturing Industries' (1954) 44 *The American Economic Review* 15; Joe S Bain, *Barriers to New Competition: Their Character and Consequences in Manufacturing Industries* (Harvard U P 1967).1936-1940\{ (1951

134 In *Continental Can Company* (Case IV/26811) Commission Decision 72/21 /CEE [1971] OJ No. L 7 of 8 January 1972/25.

135 Commission Notice - Guidelines on Vertical Restraints [2000] O.J. C 291/1; Commission Notice - Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements [2001] OJ C 003/2; Communication from the Commission - Guidelines on the application of Article 81(3) [2004] O.J. C 101/97.

136 Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C 31/5.

137 Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services [2002] O.J. L 108/33; Commission, 'Working Document on the Proposed New Regulatory Framework for Electronic Communications Networks and Services: Draft Guidelines on market analysis and the calculation of significant market power', COM/2001/0175 final.

138 See European Economic Community, *The problem of concentration in the Common Market* (1966) 3 *Competition Series*, part III : 'Néanmoins, le grand marché européen qui se crée et l'accroissement des échanges de la concurrence avec le reste du monde exigent un accroissement de la taille de très nombreuses firmes européennes au moyen d'investissements internes ou par voie de concentrations avec d'autres entreprises'.

Article 102 TFEU does not outlaw dominant positions, just their abuse. And no provision is made for a control of growth by acquisition.

On its face, the wording of the Treaty competition clause displays a pragmatic perspective towards market power formation. A competitive system is an instrument of economic policy, not an end. True, over time, the courts and agencies will then qualify this idea. The case law has read in much stricter limits by subjecting the legality of growth by alliance to strict conditions, and by considerably enlarging the limitations on organic growth strategies. But it is important to the subsequent discussion to note that a broader range of welfare targets,¹³⁹ not just market power, might constitute the policy behind the law.¹⁴⁰

C. Conclusions

US antitrust law grew explicitly into a market power law. EU law less. The different approaches taken by both regimes correlate with the challenges raised by their initial positions. Starting from abstract rules, US antitrust doctrine works towards the production of clarity. US antitrust law has a set goal, that is 'consumer welfare'. The US courts define 'competition' as a 'conflict for advantage' or as 'rivalry'. Deviations from competition arise in the presence or exercise of 'market power'. Inference from facts are drawn by application of *predictable* rules, on a spectrum that has the *per se* prohibition rule on one end, the rule of reason in the middle, and *per se* legality on the other end. The burdens of pleading, proof, and production of the facts are foreseeably distributed.

By contrast, European competition law starts from a base of rigid rules. Jurisprudence works towards adaptability. The result is that EU competition law has been assigned multiple goals, from regional integration, to consumer choice, fairness, and efficiency. The Treaty promotes 'free and undistorted competition', but no judicial clarification was ever given to the meaning of 'competition'. The courts apply *sui generis* principles of inference, known as 'by object' and 'by effect' rules. And no strict principles of evidence are followed, except for a judicial requirement that the evidence relied by plaintiffs be 'factually accurate, reliable and consistent', as well as complete.¹⁴¹

IV. SYSTEMS OF MARKET POWER CONTROL

A. Fundamental Differences in the Design of US and EU Market Power Laws

US and EU laws show marked differences in their systems of market power control. An approach that prevents undesirably obtained market power dominates US law (1). An approach that limits undesirable conduct from firms with market power positions characterizes EU law (2). These divergences have logical consequences that should structure the evolution of the law on both sides of the Atlantic (3).

139 Unlike the Sherman Act, the Treaty embedding of European competition rules requires them to be applied under a coherent, consistent, whole-government approach.

140 For example, see Articles 101 d) and 102 c) TFEU.

141 Case C-12/03 P *Commission v Tetra Laval* [2005] I-00987/47.

1. US law: Removing Market Power Resulting from Bad Competition

US antitrust law is directed toward monopoly power, but does not prohibit monopoly *per se*. The law prohibits monopoly power conditional on its being the consequence of ‘bad’ competition. Some ‘plus conduct’ is required in US law.¹⁴² In *Trinko*, Justice Scalia stressed the need for an ‘*element of anticompetitive conduct*’, beyond the mere possession of monopoly power.¹⁴³ The philosophy of US antitrust law is that market power can only be deemed ‘bad’ if ‘bad’ means are employed to obtain or maintain it. That is the meaning to give to Learned Hand’s ‘conduct falling short of monopoly’ in his wordy opinion in *Alcoa*. That *dictum* did not refer to a minimal threshold level of monopoly share that had to be crossed for the application of Section 2. The Court envisioned a conduct filter. The filter predicts whether market power is qualitatively good or bad, deserved or not deserved, lawful or not. Referring to past case law, Hand wrote that ‘the origin of a monopoly may be critical in determining its legality’.¹⁴⁴

It was not inherent in statutory law that US antitrust would look at monopoly power through a bad conduct filter. Section 1, which is not expressly concerned with monopoly, specifies a conduct requirement by referring to contract, combination or conspiracy. But Section 1 does not speak about ‘bad’ behaviour, perhaps with the exception of the loaded term ‘conspiracy’.¹⁴⁵ And Section 2, which is expressly concerned with monopolization, does not single out conduct that would trigger application of the law, though the suffixation points out to that a process or action is what the law attaches liability to.

US antitrust rules in general, and Section 2 in particular, were, however, never conceived as a direct offence against monopoly. An element of bad conduct has always been a feature of US antitrust cases. *American Tobacco* illustrates this.¹⁴⁶ Decided under both Sections 1 and 2, the case was concerned with practices that the ‘Big Three’ US cigarette manufacturers had developed to pressure down the purchase price of raw tobacco leaves, and suppress the potential competition of new markets. The Court noted that ‘the present cases are not comparable to cases where the parties, for example, merely have made a new discovery or an original entry into a new field and unexpectedly or unavoidably have found themselves enjoying a monopoly coupled with power and intent to maintain it’. An ‘additional element’ was present. A ‘clear course of dealing’ of the ‘big three’ producers had been established in the form of ‘working policies and understandings’ that gave them, ‘as a group’, power to exclude actual or potential competitors.

But what exactly constitutes ‘bad’ conduct? Or where is the line between lawful and unlawful market power? Careful study of antitrust jurisprudence casts light of an antitrust notion of bad conduct that is more than just ‘I know it when I see it’.

¹⁴² Barry E Hawk, *International Antitrust Law and Policy: Fordham Competition Law 2014* (Juris Publishing, Inc 2015) 682.

¹⁴³ *Verizon Communications, Inc. v Law Offices of Curtis V. Trinko, LLP* 540 U.S. 398 (2004).

¹⁴⁴ *United States v Aluminum Co. of America* 148 F.2d 416 (2d Cir. 1945) 429.

¹⁴⁵ The charge of conspiracy stems from the common law.

¹⁴⁶ *American Tobacco Co. v U.S.* 328 U.S. 781 (1946). Rudolf Peritz wrote that the opinion evokes the common law discourse of conspiracy. Rudolph JR Peritz, *Competition Policy in America 1888-1992: History, Rhetoric, Law* (Oxford University Press 1996).

A constant in the ‘bad conduct’ case law is definition by opposition.¹⁴⁷ In the case law, the Court deems ‘bad’ conduct that deviates from normality. In *Standard Oil*, Justice White stressed that the growth to power of the oil trust was not the result of ‘normal methods of industrial developments’.¹⁴⁸ In *Reading*, the Court found unlawful a corporate reorganization that sought to integrate rail transportation and coal production firms into a single holding company. The Court wrote that the dominating power of the holding ‘was not obtained by normal expansion to meet the demands of a business growing as a result of superior and enterprising management, but by deliberate, calculated purchase for control’.¹⁴⁹ Pursuing a similar idea, the Court stated in *Otter Tail* that the Sherman Act ‘assumes that an enterprise will protect itself against loss by operating with superior service, lower costs, and improved efficiency’. The facts on the record showed that faced with the expiry of retail franchising rights in various municipalities, incumbent power supplier *Otter Tail* responded with other means. *Otter Tail* had denied wholesale supply to, and instituted litigation against, new entrants on the distribution segment. But the most explicit negative definition of bad conduct came in *Grinnell*.¹⁵⁰ The case concerned *Grinnell*’s progressive acquisition of companies controlling 87% of the security services business in the US, and the marginalization of residual competitors by collusion, tit for tat competition, and retaliation threats. In *obiter*, the Court however defined the ‘ingredient’ of bad conduct as the ‘willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident’.¹⁵¹ Like us, subsequent cases in the lower courts read *Grinnell* as authority for bad conduct.¹⁵²

Grinnell’s definitional ellipsis is a significant contribution. Bad conduct implies an anticompetitive *end, motivation, or will*.¹⁵³ Put differently, bad conduct is deliberate. This is confirmed by exclusion of ‘accident’ in the definition. The deliberateness of bad conduct must not be confused with its evidence. As the Court held in *Sinclair*, proof of bad conduct can be brought either by showing a bad ‘purpose’ or by establishing exercise of ‘power’.¹⁵⁴ A bad purpose under Section 2 requires establishing an intent that is ‘more than an intent to compete

147 A similar practice of definitional ellipsis has characterized the case law of the lower courts. In *American Can* the District Court wrote that antitrust law does not intend to deal with the ‘*legitimate expansion of business*’. The Court added that the law seeks to prevent the ‘*illegitimate and unnatural acquirement*’ of size and power. *U.S. v American Can Co.* (n 117).

148 *Standard Oil Co. v United States* (n 95). For Justice White’s opinion, see 221 U.S. 65.

149 *United States v Reading Co.* 253 U.S. 26 (1920).

150 *United States v Grinnell Corp.* 384 U.S. 563 (1966). The case before the Court hinged on problems of market definition, not of bad conduct. The Court disposed of the issues quickly noting that ‘what was done in building the empire was done plainly and explicitly for a single purpose’ (384 U.S. 571).

151 *ibid.* 571.

152 See *Lepage’s Inc, v 3M* (n 114), where the Federal Court read *Grinnell* (n 150) as meaning a firm that ‘competes on some basis other than the merits’. The Court also referred to *Aspen Skiing v. Aspen Highlands Skiing*, 472 U.S. 585 (1985), where the Supreme Court cited *Areeda & Turner*, to suggest that bad conduct is competing ‘on some basis other than efficiency’, and alluded to conduct that ‘does not further competition on the merits’.

153 To be clear, note, however, that unlike a religion, antitrust law does not seek to expel business sin from the mind. Bad thoughts that never leave the boardroom are insufficient to taint monopoly power. A commencement of action is required.

154 *FTC v Sinclair Refining Co.* 261 U.S. 463, 475-76 (1923).

vigorously'.¹⁵⁵ The case law talks of a 'specific intent' to monopolize distinct from the intent to engage in the conduct.¹⁵⁶

The alternative of power talks directly to *Grinnell's* reference to 'superior product' or 'business acumen'. A firm will be deemed to pursue an anticompetitive end when it chooses oppressive behaviour over efficiency. Acts disclosing power will betray intent. As Justice Mc Kenna wrote in *United Shoe Machinery*, the offence of monopolization is a 'charge of oppression'. In *Jefferson Parish*, the Court considered that the antitrust offence of tying was justified on the ground that coercion of buyers in the tied market gives rise to a situation in which 'a potentially inferior product may be insulated from competitive pressures'.¹⁵⁷ It pointed out to a situation of 'disregard of consumer preferences'.

Importantly, the concept of power underpinning bad conduct is not synonymous with monopoly power. It is oppressive power. For example, a firm that burns rival factories or starts sham litigation does not exercise monopoly power. But it behaves as an oppressor. Even more clearly, the formative era jurisprudence features many cases of bad conduct concerning the acquisition of stock in rivals, or of use of corporate restructurings as means of evasion of the law, which did not implicate any utilization of market power. What matters is for bad conduct to be realistic. In *Central Lumber*, the Court talked of 'means likely to be employed', suggesting that conduct already violative of other laws might not be caught.¹⁵⁸

The requirement of establishing that conduct is bad to taint monopoly power is removed in some cases. Some cases under Section 2 have relaxed the condition of 'specific intent'. For example, the *Alcoa* opinion appeared to establish a presumption of bad conduct for cases involving an 'assured monopoly' firm.¹⁵⁹ The Court reasoned that no 'monopolist monopolizes unconscious of what he is doing'.¹⁶⁰ Such cases come close to a no fault liability system against monopolization, where the mere existence of monopoly power is the offence against the law.¹⁶¹

155 In *Olympia Equipment Leasing Co. v. Western Union Telegraph Co.* 797 F.2d 370 (1986), Judge Posner said that 'there is an 'insoluble ambiguity about anticompetitive intent', because 'most businessmen don't like their competitors, or for that matter competition' (797 F.2d 379).

156 Keith N Hylton and Ronald A Cass, 'Antitrust Intent' (2001) 74 Southern California Law Review 657. and many other legal rules, can be understood by focusing on the goal of minimizing the expected costs from legal errors. After developing a positive theory of intent standards, we apply the theory to antitrust to show that it explains both the allocation of and proof requirements for the specific intent standards in antitrust doctrine. We then use the *Microsoft* case as a concrete study of the function of intent rules in antitrust. "container-title": "Southern California Law Review", "language": "en", "page": "657", "title": "Antitrust Intent", "volume": "74", "author": [{"family": "Hylton", "given": "Keith N."}, {"family": "Cass", "given": "Ronald A."}], "issued": {"date-parts": [{"2001"}]}, "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} The specific intent standard is not just limited to attempt to monopolize cases, as often said in antitrust scholarship.

157 *Jefferson Parish Hospital Dist. No. 2 v Hyde* 466 U.S. 2 (1984).

158 *Central Lumber Co v South Dakota* 226 U.S. 157 (1912). The Court affirmed that 'the statute is aimed at preventing the creation of a monopoly by means likely to be employed' (226 U.S. 161).

159 Aaron Director and Edward Hirsch Levi, 'Law and the Future: Trade Regulation' (1956) 51 Northwestern University Law Review 281. See *United States v Aluminum Co. of America* (n 144).

160 A few years later, the Court appeared to extend the *Alcoa* derogation to cases involving firms without monopoly power. In the 1948 *Griffith* opinion, the Court said that it is 'not always necessary to find a specific intent to build a monopoly in order to find that the anti-trust laws have been violated'. See *United States v. Griffith* (n 123), 334 U.S. 100. The Court affirmed liability against four movie exhibitors who had appointed a joint agent to negotiate with distributors. The language of the Opinion is, however, confusing, because the facts suggest the exhibitors already enjoyed monopoly power prior to the pooling of their buyer power. Later, the Court also added that Section 2 liability obtains in the presence of monopoly power, 'coupled with the purpose or intent to exercise that power'. See *ibid* n 123, 334 U.S. 107. What is probably relevant in *Griffith* is that the firms tried to extend their monopoly power to towns where they had none.

161 A limited exception was carved out for firms with a monopoly 'thrust upon' them. See n 144, 148 F.2d 429.

2. EU Law: Limiting Bad Competition from firms with Market Power Positions

Just like US law, EU competition law does not attack monopoly power itself. But this similarity overlooks an important distinction. The European competition rules address a different problem. Instead of removing market power caused by bad competition, EU law restrains the ability of firms with market power positions to maximize their returns. Positions of market power achieved by combinations of firms or single firms are within the bounds of EU law. Their abuse is not.

EU law's 'attitude of neutrality' towards the formation of monopoly power inheres in the Treaty.¹⁶² In regard to the formation of monopoly power by a plurality of actors, EU law establishes a flexible prohibition rule. The application of Article 101 TFEU is conditional on a substantive test of restraint of competition. This is different from Section 1 of the Sherman Act. In US law, the prohibition is only subject to a jurisdictional condition of restraint of trade. As we know, the unqualified language of Section 1 directed the Supreme Court to promulgate extremely strict *per se* prohibition rules (in *Trans Missouri Freight Association* and *Socony*, for example), which have very few equivalents in the history of EU case-law (with perhaps the exception of isolated cases like *Expedia*). Moreover, the prohibition of Article 101(1) TFEU is qualified by an exemption clause. An improvement of production or distribution, or other public policy benefits may salvage an anticompetitive agreement. The limit to the redemption of anticompetitive agreements is that competition is not substantially eliminated. A degree of monopolization of the market higher than dominance is necessary to block an exemption.¹⁶³ The case law actually goes as far as repeating the idea that all agreements can benefit from an Article 101(3) TFEU exemption, including those entailing power obtained by cartelization.

The same can be said of Article 102 TFEU. Assuming dominance is the analogue of monopoly power, its existence is not prohibited, just its abuse. In *Michelin I*, the CoJ stated that '[a] finding that an undertaking has a dominant position is not in itself a recrimination'.¹⁶⁴ Even more clearly, the formation of market power is beyond attack. In *Volkswagen*, the Court recalled that the provision caught firms with a dominant position 'at the time of the abuse'.¹⁶⁵ Obviously, the EU courts indulge in some reckoning that a market in which a dominant position exists is not economically optimal. A commonly encountered judicial statement is that a dominant position implies that 'the degree of competition is already weakened'.¹⁶⁶ Put differently, EU law assumes that a situation of market dominance implies some monopoly performance, even though it need not 'have eliminated all opportunity for competition'.¹⁶⁷ But this state of affairs creates no legal cause of action against the means deployed by a firm to reach dominance.

¹⁶² René Joliet, *Monopolization and Abuse of Dominant Position: A Comparative Study of the American and European Approaches to the Control of Economic Power* (Université de Liège 1970).

¹⁶³ Joined cases T-191/98, T-212/98 to T-214/98 *Atlantic Container Line and Others v Commission* [2003] II-03275/3298, para 939: 'though eliminating competition may preclude the application of the block exemption provided for by Regulation No 4056/86, the mere holding of a dominant position has no effect in that regard. As the concept of eliminating competition is narrower than that of the existence or acquisition of a dominant position, an undertaking holding such a position is capable of benefiting from an exemption'.

¹⁶⁴ Case 322/81 *NV Nederlandsche Banden Industrie Michelin v Commission of the European Communities* [1983] 1983-03461/3466, para 10. EU law thus appears to tolerate reduction of output of third parties by an existing monopolist, and only catches qualitatively more severe output reductions, considered abusive by law.

¹⁶⁵ Case T-62/98 *Volkswagen AG v Commission of the European Communities* [2000] II-2713/2707, para 230.

¹⁶⁶ See, e.g., Case C549/10 P *Tomra Systems ASA and Others v European Commission* [2012] ECLI:EU:C:2012:221, para 17.

¹⁶⁷ Case 27/76 *United Brands Company and United Brands Continentaal BV v Commission of the European Communities* [1978] 1978-00207/209, para 113.

A corollary is that EU law never requires a dominant firm to justify its existence by proof of procompetitive origin.

Other legal provisions or doctrines reveal the disinterest of the EU competition provisions toward the origins of market power. The first is the existence of a special regime applicable to State-owned firms and firms enjoying a State granted monopoly position at Article 106 TFEU. The special treatment of State privileges is a strong pointer that the origins of market power had been recognized as problematic in some cases, but not in general. The absence of Treaty provisions preventing the constitution of dominant position by external growth (ie, mergers), or against ‘attempts’ to obtain monopoly by internal growth as in Section 2, is another sign of the EU’s tolerant attitude towards the formation of market power. Last, but not least, early commentators had noted that a strong indication of EU law’s acceptance of monopoly power lied in the secondary role played by structural remedies in the legal weaponry deployed toward dominant firms. Unlike the rule of nullity under Article 101(2) TFEU, Article 102 TFEU prescribes no dissolution, divorcement or divestiture sanction against the organisation of economic activity within a dominant firm. When made available by legislation in secondary legislation, structural relief has only been open as a last resort, subject to a proof of inadequacy of behavioural remedies.¹⁶⁸

So how can we best define the EU philosophy toward market power? EU competition law appears based on an idea of market power position as a source of unique advantages over competitors. In its seminal *United Brands* judgment, the Court held that a dominant position ‘enables’ a restraining influence on other firms.¹⁶⁹ EU law thus subjects firms with a market power position to a duty of care in the conduct of their business. This is the meaning to give to the EU Courts’ doctrine whereby antitrust law places a ‘special responsibility’ on firms with a dominant position.¹⁷⁰ The duty of care is not required from other participants.

From an economic standpoint, EU law can be said to tolerate the deadweight loss inherent in the existence of market dominant firms. And it can be said to challenge further restrictions of output. The text of the Treaty accordingly reputes unlawful certain kinds of improper exploitation of dominant market power against suppliers and customers. This reading also allows to make sense of the case law that extended the ambit of the prohibition to practices that lead to the restriction of rivals’ output by exclusionary practices.

At the same time, the idea that dominance enables special conduct has little support in the market power literature.¹⁷¹ Application of the law to exclusionary policies encounters a limit in

168 See Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2002] OJ L 1/1, Art.7: ‘Structural remedies can only be imposed either where there is no equally effective behavioural remedy or where any equally effective behavioural remedy would be more burdensome for the undertaking concerned than the structural remedy’.

169 See *United Brands* (n 167).

170 See *Michelin I* (n 164) para 57.

171 There is no economic support for this idea in the market power literature. Dominant firms are not market superheroes with special abilities. With equal access to finance, all firms are able to engage in the panoply of competitive activities often criticized from dominant firms, like pricing below cost, refusing to contract, or absorbing their competitor. The important point, however, is that a dominant firm might be more willing to engage in competitive conduct. This is because the private gains resulting from such competitive conduct are higher in the case of a market dominating firm. The control over output retained and exercised by the dominant firm implies an absence of future replacement of foreclosed competition. Thus, in economic terms, the present discounted value of monopoly rents is higher for the dominant firm because it can rely on an assurance of absence of competitive attack in the short term. Besides, in some cases, the marginal costs are lower, because a dominant firm can utilize its market position as an instrumentality for abuse (for example, in tying cases). Now, we write private gains deliberately. The question whether dominant firm exclusion generates social costs constitutes a distinct issue. In general, the social costs of anticompetitive exclusion depend on whether rivalry determines economic efficiency. The answer to that

cases of firms with existing dominant positions. With established control over industry output, the dominant firm need no longer to repeatedly engage in competitive conduct.¹⁷² Monopoly rent extraction can proceed. Of course, the law might catch the measures adopted by the dominant firm to maintain its position. But if such need exists, the monopoly power diagnosis is questionable in the first place. Vulnerability of the dominant firm should exclude the substantial market power ingredient required for liability.

Early writers had foreseen this problem.¹⁷³ The sole logical way to read the concept Article 102 TFEU is to consider that it embodies a system of control of monopoly exploitation of the market. Anticipating that the law will prevent it from charging unreasonably high prices and extract more than a fair profit, the dominant firm will have low incentives to exclude in the first place.

3. Different Legal Approaches to the Control of Market Power

Fundamental differences characterize the US and EU systems of market power control. They are very well illuminated by a comparison between the focus of inquiry and the filters employed by single firm conduct law to determine illegality – in *Trinko*, Justice Scalia talked of antitrust law's '*special lens*'.¹⁷⁴ US law focuses on monopoly power. It applies a bad conduct filter to establish liability. EU law focuses on abusive behaviour. It retains a dominant market position filter as the determinant of legality of business conduct.

Obviously, in the two systems, both monopoly power and bad conduct are necessary to a finding of liability. But the distinct focus and filters of US and EU laws should produce important differences in the respective weight of both ingredients. Because US law strikes acts conducive to monopoly power, it ought, in logic, to condemn business conduct without proof of contemporaneous monopoly power. By contrast, a showing of existing monopoly power is a prerequisite for liability under EU law.

These differences should explain that US law neither demands proof of exertion of market power through high prices or low output, nor refuses application of the law in the face of declining prices or rising output. By contrast, observable monopoly power ought to play a larger role in European law. And with a focus on abuse 'of' a dominant position, EU law's interest is on business conduct that calls on market power. This should leave out of the prohibition classes of acts that do not make instrumental use of market power, even if they intend to, or result in, achievement of monopoly power. Two examples illustrate this idea: the buyout of competitors or the use of judicial proceedings against rivals. In EU law, they should be beyond reproach. This is not the case in US antitrust, because the Sherman Act attacks anticompetitive conduct, regardless of whether it calls on market power.

Consequently, it could be expected that the physiognomy of antitrust cases in US and EU law would differ, with higher emphasis on the economic inquiry into market power in the EU,

question cannot be given in the abstract. Competition is not a first best in the presence of increasing returns or with 'race to the bottom' situations. Besides, losses in rivalry might be more than outweighed by the exclusion of inefficient producers from the market.

172 Even if there is not absolute monopoly in the real world, the point here is the greater a firm effective control of industry output, the lower the need to engage in exclusionary conduct.

173 Joliet (n 162).

174 In the US, monopoly power is looked through the special lens of bad conduct. In the EU, bad conduct is examined through the special lens of substantial market power.

and stronger interest into the normal standards of business behaviour in the US. As will be seen, this *predictable* evolutionary course of the law has not been the one that was followed.

B. Substantive Convergence by Judicial and Legislative Intervention

Like other legal systems, antitrust regimes are living organisms. The rich interpretive and legislative history of US and EU antitrust has increasingly blurred the dividing line between both systems of control of market power. Today, both regimes appear to prescribe what Neale called an '*admixture*' of the bad conduct and market power '*ingredients*'. This sub-section compares how construction of the antitrust provisions by courts, and elaboration by the legislature, moved both regimes closer to each other, yet without aligning them. First, a framework of comparison that draws a map of four possible antitrust regimes of market power control is laid down (1). With this in place, convergence between US and EU law regarding anticompetitive collaboration (2) and single firm conduct (3) is discussed. The sub-section is concluded by taking stock of the process of convergence, and asking why it took place (4).

1. Two Ingredients, Four Regimes

Any authority with interpretive power over antitrust law can change its nature. The conduit for change consists in modifying the legally material substantive elements that the law requires to establish bad conduct. Two types of elements are relevant in antitrust law. The first is characterization of bad purpose. The second is demonstration of market power effects. Both can involve more and less economics. Purpose and effect can be alternative, or cumulative. These will be discussed in turn.

First, antitrust statutory or case laws require a showing of bad purpose. Bad purpose can be required as an ingredient of the antitrust violation. Absence of bad purpose can also play the role of an excuse against allegations of antitrust violation. Bad purpose is often associated with impropriety, fraud, guile, excess, or other 'moral derelictions'.¹⁷⁵ Because the essence of competition consists in causing deliberate injury to rivals, bad purpose is difficult to prove. Acts that contravene the normal standards of business customs, professional ethics, norms, and usages denote culpable intent. Antitrust law draws similar inferences from a defendant inability to give an objective business justification for its conduct.

Second, antitrust statutory or case laws require to shed light on the anticompetitive effect of business conduct. Interest in effects denotes a market power mind-set in the law.¹⁷⁶ Several categories of market power inquiries are possible, from a mere consideration of 'context' to an extended examination of the factual underpinnings, to an elaborate structural analysis of market definition and a market position evaluation, to the fullest market analysis of price, output, and innovation impacts.¹⁷⁷

¹⁷⁵ See *Alcoa* (n 144), 431.

¹⁷⁶ See Justice Breyer dissenting opinion in the case *Ohio v. American Express Co.* 585 U.S. ____ (2018): 'proof of actual adverse effects on competition is, a fortiori, proof of market power'. In *FTC v Indiana Fed'n of Dentists* [1986] 476 U.S. 447, the Supreme Court stated that an inquiry into market power is to determine whether an arrangement 'has the potential for genuine adverse effects on competition'.

¹⁷⁷ In US and EU law, this analytical crescendo is best envisioned on a spectrum with indirect evidence on the one end, and 'direct evidence' on the other end. We discuss this in Section V.

The line between the two sets of activities is sometimes blurred.¹⁷⁸ It might be the case that the first activity, namely characterization of bad purpose, can be established upon a finding of market power that pertains to the second activity. For example, the case law might hold that a market power finding conditions whether conduct can be deemed unreasonable, and in turn unlawful under the antitrust rules.

Choices made, consciously or not, in antitrust law interpretation about these activities give rise to four possible regimes for market power control systems. First, application of antitrust law requiring low activities of bad purpose characterization and market power examination entails a ‘prohibition’ or ‘strict liability’ regime.¹⁷⁹ Second, finding offense to antitrust law with high bad purpose characterization activities, and low regard for market power implies an ‘unfair competition’ (or ‘fault’) regime. A non-antitrust expert will talk of a fault system. Third, when antitrust liability is established by looking only at market power, regardless of bad conduct, the law adopts a market power ‘regulation’ (or ‘no fault’) regime. Last, conditioning an antitrust violation on establishing bad conduct and market power is the hallmark of an ‘abuse’ of market power regime.¹⁸⁰ We can represent these various regimes on the 2 x 2 matrix below (table 3).

Table 3 Market Power Regimes

Purpose		High	Fault/Unfair Competition regime	Abuse regime	
		Low	Prohibition/Strict Liability regime	Regulation/No Fault regime	
			Low	High	Effect

With this background, we have now a common unit of analysis to compare the evolution of US and EU laws evolution. This is what we turn to.

2. Interfirm Collaboration

a. US law

With narrow exceptions, contemporary Section 1 law subjects agreements to a market power regulation approach. That is to say, Section 1 law prohibits combinations conditional on a

¹⁷⁸ Yet, the dichotomy does not correspond to the *per se* v rule of reason difference. The *per se* v rule of reason describes ‘complementary categories of analysis’. Here, we have two different activities by nature: one is ontological, the other is consequential.

¹⁷⁹ A non-antitrust lawyer will discuss this in terms of strict liability. When the law is set this way, the main task of antitrust practice consists in evaluating if observed facts falls within one of the formal constructs set in the law. Continental lawyers call this task legal qualification. In common law system, this might be called ‘pigeonholing’, drawing inspiration from the Supreme Court in *FTC v Indiana*, where it said that it was asked to force conduct in the group ‘boycott’ pigeonhole to then apply the *per se* prohibition rule. In both cases, this activity is where lawyers, not ornithologists, deploy their craft. Characterization is more or less easy, depending on whether the law is under or over specified. Sometimes, pigeonholing is far from mechanical. In some cases, the intensity of investment into characterizing conduct as falling within a forbidden category is high. Defendants in ‘price fixing’ cases often fight very hard to challenge the analogy between the bad construct and the facts on the record, all the more when bad conduct construct triggers application of a *per se* rule. See n 176.

¹⁸⁰ This is conforming to the idea embodied in *Aspen Skiing* that in an ‘abuse of monopoly power’, the conduct is ‘motivated by an anticompetitive purpose’. See n 151, 611.

showing that participating firms hold a market power position. Since the 1970s, there is wide support in the case law to a proposition that market power determines the legality of agreements, regardless of how unfair, legitimate, horizontal, or vertical, they are. Two cases show this. The first is *NYNEX v Dicon*.¹⁸¹ The evidence on the record, admitted by the Supreme Court, told the story of two firms devising a fraudulent scheme to deceive regulators into approval of extortionate prices to consumers. There was ample evidence of bad purpose in the case. The Court, however, denied the relevance of such facts for antitrust liability. It held that doing so ‘would transform cases involving business behavior that is improper for various reasons, say, cases involving nepotism or personal pique, into treble damages antitrust cases’. A proof of harm to competition was necessary. The second case, *Northwest Wholesale Stationers* displays, on the basis of contrasting facts, the idea of an antitrust regulation of agreements.¹⁸² The case asked whether the members of a cooperative designed to purchase office supplies could lawfully exclude one a member, on the ground that it had maintained competing wholesale operations and refused to disclose ownership in breach of the buying alliance bylaws. The Court reflected that purchasing cooperatives are not a ‘concerted activity characteristically likely to result in predominantly anticompetitive effects’. It added that ‘reasonable rules’ are necessary in cooperatives. In an antitrust system focused on bad conduct only, these findings should have been sufficient to draw the curtain on the issue. But the Court maintained a possibility for antitrust plaintiffs to seek application of antitrust liability in similar cases, conditional on proof of ‘market power or unique access to a business element necessary for effective competition’.¹⁸³

On the books, one irreducible bastion of Section 1 law stays, however, subject to a prohibition regime. The case law has consistently refused to apply a market power filter in relation to horizontal price fixing and group boycotts. In *Socony* the Court held that ‘monopoly power is not the only power which the Act strikes down’. The target of the case was a combination of oil producers that had bought and removed ‘distressed’ gasoline from the market. The determinant of legality in *Socony* was that the challenged surplus purchasing programs had as their ‘direct purpose and aim’ the raising and maintenance of prices. And even though the available evidence gave rise to ample discussion, the Court’s holding appears to stand on the sole ground that ‘any combination which tampers with price structures is engaged in an unlawful activity’. This passage of the Opinion hints at a strict liability regime, more than a torts one.

The strictness of the approach is well illustrated in *Kiefer Stewart Co v Seagram and Sons*. Two liquor suppliers had withheld deliveries to wholesalers unwilling to observe maximum resale prices. Beyond an absence of manifest impropriety, maximum resale prices had been adopted in response to market power strategies from wholesalers towards retailers. The Court refused to take into account purposive justifications or countervailing market power effects. Mechanically applying the *Socony* rule, the Court added the abstract proposition that such agreements ‘cripple the freedom of traders’, and ‘restrain their ability to sell in accordance with their own judgment’.

Since *Socony*, the Supreme Court has confirmed the strict liability rule against price fixing on few occasions.¹⁸⁴ In *Catalano*, the Court considered that the joint withholding, by beer

181 466 U.S. 2 (1984).

182 *Northwest Wholesale Stationers, Inc. v Pacific Stationery and Printing Co.* 472 U.S. 284 (1985).

183 The Court confusingly talked of applying the *per se* rule to similar facts.

184 Another example can be identified in *United States v Container Corp.* 393 U.S. 333 (1969): ‘interference with the setting of price by free market forces is unlawful *per se*’.

suppliers, of credit facilities towards retailers, fell ‘squarely’ within the traditional *per se* rule against price fixing. The Court rejected any further interest of the law towards market power, observing that the *per se* rule could reach combinations with ‘substantially less direct impact on price than the agreement alleged in this case’.

In some cases involving facts not even remotely close to price fixing, the Court also echoed *Socony*. In *National Soc’y of Professional Engineers v US*, the Court was questioned over the legality of a professional association’s ethical ban of competitive bidding.¹⁸⁵ The difficulty of the case turned on the fact that the ethical ban appeared based on a legitimate concern of avoidance of race to the bottom competition amongst engineers. There was no dispute that the ethical ban had an adverse impact on competition. The Court, however, held that preserving the integrity of the price system under the Sherman Act implied sacrificing other public interests.

Last, in *FTC v Indiana*, the Court found liability against dental practitioners’ concerted refusal to communicate x-rays to patient contemplating treatment. In a reasoning reminiscent of *Socony*, the Court outlined that ‘a concerted and effective effort to withhold (or make more costly) information desired by consumers for the purpose of determining whether a particular purchase is cost justified is likely enough to disrupt the proper functioning of the price-setting mechanism’.

Ambiguity remains on whether *Socony*’s strict rule of liability remains good law. In *Broadcast Music, Inc. v CBS*, the Court refused the fallacy that there is necessarily price fixing when independent firms sell complementary products through a common agent at a single, bundled, price.¹⁸⁶ A few years later, in his dissent in *California Dental Association v. Federal Trade Commission*, Justice Breyer however, called for application of the *Socony* rule to restrictions on price and non-price advertising imposed on dentists by their professional association.¹⁸⁷ Subsequently, in *NCAA v Board of Regents*, the Court caused further confusion. The case had to do with a scheme from the *NCAA* that sought to control member universities’ freedom to televise football games in order to protect live attendance.¹⁸⁸ The Court recognized a ‘deviation from the operations of a free market’ à la *Socony* constitutive of a ‘naked restriction on price or output’. Departing from *Socony*, however, the Court acknowledged the existence of a market power situation, and permitted the defendant to offer a procompetitive justification in defence.

Where do we stand? In US case law, a regulation approach is used to analyse most horizontal coordination, joint ventures, and vertical agreements.¹⁸⁹ The focus of analysis is neither on fault, nor on form. The focus of analysis is on market power. The assessment of price fixing or group boycotts is subject to a prohibition regime. The exact severity of the *per se* rule in these cases is unclear.

185 In *National Society of Professional Engineers v United States* 435 U. S. 679 (1978) the Court acknowledged that ‘this is not price fixing as such’.

186 *Broadcast Music, Inc. v CBS* 441 U.S. 1 (1979).

187 119 S. Ct. 1604 (1999).

188 *NCAA v Board of Regents* 468 U.S. 85 (1984).

189 *Copperweld Corp. v Independence Tube Corp.* 467 U.S. 752 (1984). The Court held that: ‘Other combinations, such as mergers, joint ventures, and various vertical agreements, hold the promise of increasing a firm’s efficiency and enabling it to compete more effectively. Accordingly, such combinations are judged under a rule of reason, an inquiry into market power and market structure designed to assess the combination’s actual effect’ (467 U.S. 768).

b. EU law

Like US law, a regime of market power regulation applies to agreements in EU law. Broadly, the legality of an agreement is determined by application of a market power filter. Since the 1990s, statutory legislation relies on market share thresholds to delineate a safe harbour for interfirm cooperation. This is true both for horizontal and vertical agreements. As a seasoned practitioner once told us: the philosophy of EU law is very liberal. Subject to staying below certain market share levels, virtually everything is allowed.

A difference with US law, however, is that European rules approach more conducts with strict liability. Beyond price fixing, the prohibition regime applies to all ‘cartels’, defined broadly as competitor agreements on ‘purchase or selling prices or other trading conditions, including in relation to intellectual property rights, the allocation of production or sales quotas, the sharing of markets and customers, including bid-rigging, restrictions of imports or exports or anti-competitive actions against other competitors’.¹⁹⁰ Moreover, the strict liability regime covers more than just price fixing arrangements. Resale price maintenance is also subject to strict liability, as well as schemes that grant sellers absolute territorial protection along the national boundaries of EU countries.¹⁹¹

The direction through which EU law has evolved is also different from US law. Initially, EU text law prescribed both an alternative between a fault and a regulation regime for some agreements. By forbidding restrictions of competition by ‘object’ and ‘effect’, EU law offered two ways for plaintiffs to establish an infringement of the law. Under an ‘object’ analysis, EU law sought to outlaw bad conduct upon investigation of goal, intent, or motivation.¹⁹² As far as ‘effect’ is concerned, the focus was on anticompetitive distortions.

Now, like in US law, but through a different technique, the case law gradually increased the footprint of market power in Article 101 TFEU analysis. The case law started to allow evaluation of anticompetitive ‘object’ by reference to economic context, hence collapsing the boundary with the investigation required in a ‘regulation’ regime. The case that initiated that tendency is *Société Technique Minière*. A German manufacturer of heavy construction equipment had granted an exclusive franchise for the sale of motor graders in France, and added a right of first refusal in case of delivery of competing products. The Court was asked to rule on the test of illegality to be applied to the scheme, and related clauses. The Court confusingly held in the dispositive part that to establish whether an exclusive franchising agreement combined with a anticompetitive ‘object’, a limited inquiry focused merely on the contract, its terms, and its clauses sufficed, but reasoned in the operative part that it was necessary to undertake an investigation of the economic context in which it had to be applied. Understandably, the Court was trying to push back on an extreme interpretation of the law advanced by the agency that sought to deem every restriction of contractual freedom by agreement unlawful.

190 Directive 2014/104/EU of the European Parliament and of the Council of 26 November 2014 on certain rules governing actions for damages under national law for infringements of the competition law provisions of the Member States and of the European Union [2014] OJ L 349/1, Art. 2. In reality, the definition of the Directive is even described as non-exhaustive (see Directive 2014/104/EU, recital 14). For example, the law regards as cartels the sharing of ‘individualised intentions regarding future prices or quantities’. See Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2011] OJ C 11, para 74.

191 See Joined Cases 56 and 58/64 *Établissements Consten S.à.R.L. and Grundig-Verkaufs-GmbH v. Commission* [1966] 00458/301.

192 Micheal V Waelbroeck and Aldo Frignani, *Concurrence* (Commentaire J. Mégret. Le droit de la CE et de l’Union européenne), Éditions de l’Université de Bruxelles 1997, 182; René Joliet, ‘La légalité des clauses de fidélité d’approvisionnement au regard de l’article 85 du Traité de Rome’ (1968) *Revue critique de jurisprudence belge* 146.

In following cases, the Court appeared to reverse this trend.¹⁹³ In *Delimitis*, for example, the Court showed that substantive content of a 'by object' restriction corresponds to a tort, or bad conduct. The case was concerned with the legality of a minimum purchasing requirement imposed by a brewery on a tenant, in exchange for a rent. In considering whether the agreement had an anticompetitive 'object', the Court observed that beer supply contracts entailed reciprocal 'advantages' for suppliers who benefit from guaranteed outlets, and resellers who gain access to market.¹⁹⁴ No elaborate inquiry of the facts was necessary to find that the contract entailed no tortious behavior. The Court appeared to appeal to experience in support of the view that beer supply agreements aligned 'reseller's and supplier's shared interest in promoting sales of the contract goods'.

But the Court blurred the line again. Many years later, in *Allianz Hungary*, the Court was asked to rule on agreements in which insurance companies paid higher repair rates to car dealers meeting sales targets of coverage contracts. The Court held that anticompetitive object could be established by analysis of context covering 'the nature of the goods or services affected, as well as the real conditions of the functioning and structure of the market or markets in question'.

An idea of applying a market power lens for the antitrust evaluation of most agreements sounds reasonable. But this evolution of the case law shocked antitrust practitioners. The problem is that an 'object' framework does not correspond to what an economist would deem a complete market power framework. In an 'object' regime, the law disregards all defences adduced by defendants: procompetitive efficiencies and objective justifications are given short shrift. And the law does not consider proof of minimal effects relevant when implementation allows a consideration of concrete impact.¹⁹⁵ This is because the Court never updated a doctrine that treats 'object' restrictions under a regime equivalent to the *per se* prohibition rule. *Allianz Hungary* thus implied a setting biased against defendants. Practitioners argued that if conduct ought to be determined by consideration of anticompetitive effects, the correct route towards liability is a comprehensive market power analysis, in which opportunities to account for procompetitive effects exist.

The Court reversed course in a series of cases. In *Cartes Bancaires*, *ING Pensii*, and *Generics*, the Court maintained a reference to an analysis of 'context', but incrementally phased out the asymmetrical market power analysis allowed in *Allianz Hungary*. The *Cartes Bancaires* case had to do with surcharges applied by bank associations to some network members in order to balance issuance and acceptance of payment cards within their networks. The Court supported the idea of an economic approach to such agreements, but suggested that the proper legal avenue was under an 'effects' framework, while the 'object' category covered a more restrictive set of circumstances. Even more clearly, in *ING/Pensii*, the Court gave guidance about the substantive content of an 'object' analysis. The *ING/Pensii* Court was faced a customer sharing agreement between fourteen pension funds whose aim was to reallocate clients that had mistakenly signed up to more than one of them. The Court declared that under an evaluation of anticompetitive object, the focus had to be on the 'precise purpose' or the agreement. In turn, the Court declared that object depends 'simply on the terms and

¹⁹³ Case 23-67 *SA Brasserie de Haecht v Consorts Wilkin-Janssen* [1967] ECLI:EU:C:1967:54 407.

¹⁹⁴ Case C-234/89 *Stergios Delimitis v Henninger Bräu AG* [1991] I-00935/977.

¹⁹⁵ In *Expedia*, a case about the establishment of a joint venture in online travel the Court held 'It must therefore be held that an agreement that may affect trade between Member States and that has an anti-competitive object constitutes, by its nature and independently of any concrete effect that it may have, an appreciable restriction on competition.' Case C226/11 *Expedia Inc. v Autorité de la concurrence and Others* ECLI: ECLI:EU:C:2012:795 37.

the objective aims of the agreements', with context in the back of one's mind.¹⁹⁶ Any remaining doubt that object means purpose were eliminated in *Generics*.¹⁹⁷ The facts of *Generics* involved payments from a pharmaceutical firm to generic manufacturers in exchange for the termination of patent litigation. While the legal rule formulated by the Court to assess the legality of patent settlement agreements under Article 101 TFEU remains disputable, the core idea conveyed by the judgment in relation to 'object' appears clear: the size of the financial transfers between the patent holder and an infringer allows the drawing of reasonable inferences about the purpose of the agreement.¹⁹⁸ *Generics* is one more suggestion that object equals purpose, and effect equals market power.

Now, where do we stand? In EU law, most agreements can be dealt with under a tort or regulation approach. A few are dealt with under a prohibition regime. Swings in the case law that allow a finding of liability by proof of effects under a defendant unfriendly 'object' framework lead to a biased market power analysis, that discounts procompetitive justifications and observations of minimal effects.

3. Single Firm Conduct

The words used in the US and EU provisions on single firm conduct point *prima facie* to a system of abuse. None flatly outlaws monopoly and dominant positions. The system embodied in Section 2 prohibits acts leading to monopoly. Unlike Section 1, it does so without specifying clearly a category of acts covered by the offense.¹⁹⁹ Article 102 TFEU is more explicit. The provision is directed against acts that practice the power stemming from a dominant position. EU law proscribes dominant market power in action.

Besides these similarities, both abuse systems originally strike different acts. Section 2 is designed to cope with abuse leading to the formation of monopoly power. In contrast, Article 102 TFEU leaves monopoly power formation free from the sanctions of the law, but imposes limits to market power utilization that goes beyond a fair use. In other words, while Section 2 provides checks on the achievement of monopoly, and growth of market power, Article 102 sets out constraints on the employment of dominant market power.

Judicial interpretation has blunted these neat boundaries. Both regimes are today remarkably close. US law has endorsed a theory of abuse of monopoly power similar to that embodied in Article 102 TFEU (a). EU law has applied tests identical to those developed under Section 2 without however adopting a monopolizing system (b).

a. US law movement towards a market power conduct filter

It is well established since *Grinnell* that application of Section 2 requires both conduct with a bad purpose and a market power outcome. The chain of action that the law contemplates is one of conduct leading to monopoly. The law does not require the presence of a base of market

¹⁹⁶ See similarly, Case C-345/14 *SIA „Maxima Latvija” v Konkurences padome* [2015] ECLI:EU:C:2015:784. In para 23, the Court focuses at para 23 on 'the analysis of the content of [the] agreements' to declare an absence of anticompetitive object.

¹⁹⁷ Case C-307/18 *Generics (UK) Ltd and Others v Competition and Markets Authority* [2020] ECLI:EU:C:2020:52.

¹⁹⁸ The Court repeated this idea in Case T-472/13 *H. Lundbeck A/S and Lundbeck Ltd v European Commission* [2016] ECLI:EU:T:2016:449, para 117.

¹⁹⁹ The focus on acts is nevertheless unmistakable in light of the reference to 'attempts' to monopolize.

power to determine the legality of single firm conduct, just proof of a monopoly power injury.²⁰⁰ And in logic, the law does not require that the element of conduct utilizes market power. For example, if the smallest firm in a duopoly blows up the factory of its competitor leading to bankruptcy, it can be held guilty of infringement of Section 2 (independently of any criminal proceedings).²⁰¹

Section 2 law, however, moved early to establish that proof of a base of market power allowed an inference of monopoly intent. This understandable evolution in the law in turn has produced a less inevitable change in doctrine. A requirement of utilization of market power appears now necessary to trigger application of Section 2.

Let us focus our attention on the first turn taken in the case law. As courts were asked to apply Section 2 to anticompetitive tactics of established monopoly firms, practical cues were drawn from the market position of antitrust defendants. Nothing in the word 'monopolization' used by the law restricted application of Section 2 to creation of market power that never existed. Beyond anticompetitive constitution of monopoly power, the wording of statute could reach anticompetitive conservation or consolidation of monopoly power. Thus, as cases of this kind started to develop, proof of an antecedent base of monopoly power played two roles. First, it allowed a strengthened suspicion of anticompetitive intent, motivation or purpose. This evolution might explain why until the Supreme Court *Aspen Skiing* opinion in 1984, discussion of the bad purpose ingredient in Section 2 cases had faded in the background.²⁰²

Second, a showing of a base of monopoly power plausibly gave stronger confidence in the prediction of a monopoly outcome. Section 2 cases in the lower courts show this. In *Microsoft*, one aspect of the case focused on Internet Access Providers' exclusive or default contractual use of *Microsoft's* browser Internet Explorer ('IE').²⁰³ The Court of Appeals appeared to consider that the preexisting monopoly position of *Microsoft* constituted 'special circumstances' supporting a violation of section 2 'even though the contracts foreclose less than the roughly 40% to 50% share usually required for a §1 violation'. Attempts to monopolize cases are also reflective of this idea. In *Spectrum Sport*, the Court says that even in attempt to monopolize cases, there is a requirement of 'proof of market power in a relevant market'. The requirement makes sense. Attempts to monopolize cases require a showing of a 'dangerous probability' of monopolization. A practice from a firm with preexisting market power will more likely meet the 'dangerous probability' standard placed by the law upon plaintiffs. This is because, existing monopoly power implies what the Court in *Lorain Journal* called 'threatened competition'.²⁰⁴

200 See *Brooke Group Ltd. v Brown & Williamson Tobacco Corp.* 509 U.S. 209 (1993). The Court said: 'Even an act of pure malice by one business competitor against another does not, without more, state a claim under the federal antitrust laws; those laws do not create a federal law of unfair competition'. By adding a recoupment test, that is a market power filter, the Court stated that they are 'essential components of real market injury' or an 'injury to competition' (509 U.S. 225-226).

201 That tortious conduct is at the heart of Section 2 law is underlined in the modern interpretation Mr. Justice Scalia's interpretation of the *Aspen Skiing* doctrine. In *Trinko*, Scalia dismissed application of the refusal to deal precedent established in *Aspen Skiing* to a telecommunications incumbent discriminatory processing of competitors' request for access to its network. Recall that in *Aspen Skiing*, monopoly power was the easy part. The opinion concentrated on whether the refusal to supply was the bad conduct, and investigated the facts in considerable detail to see if they disclosed evidence of predatory conduct. To rule out in *Trinko* the application of this precedent, the Court noted that the defendant prior conduct shed no light 'upon the motivation' of its refusal to deal, and whether it could possibly be explained by 'anticompetitive malice'. With this, the test of a refusal to deal, and more generally, appears conditional on a proof of 'dreams of monopoly'. See Section IV of judgment in *Aspen Skiing* (n 151).

202 Marina Lao, 'Aspen Skiing and Trinko: Antitrust Intent and "Sacrifice"' (2005) 73 Antitrust Law Journal 171.

203 *US v Microsoft Corp.* 253 F. 3d 34 - Court of Appeals, Dist. of Columbia Circuit (2001).

204 *Lorain Journal Co. v United States* 342 U.S. 143 (1951).

So far, so good. In addition to this, Section 2 case law has also taken an unnecessary turn, by suggesting that utilization of size or market power was necessary for a finding unlawful monopolization. Starting with *Swift*, where the Court said that size carries with it an opportunity for ‘abuse’, the Court in following cases appeared to consider that utilization of size was the offence against the law. In *Alcoa*, Learned Hand held that *Alcoa* had ‘utilized its size for abuse’. Hand confusingly relied on evidence of *Alcoa*’s aggressive capacity expansion in a context of growing ingot demand as proof of monopoly power utilization.²⁰⁵ Obviously, it defied understanding to appreciate the instrumental role that size could ever play in the building of new plants or correct anticipation of future market trends. Hiding sloppy reasoning behind pompous rhetoric, Hand conceded that the crux of the problem lied in *Alcoa*’s ‘great organization, having the advantage of experience, trade connections, and the elite of personnel’. In effect, Hand was lending credence to the idea that size, not utilization, was in itself attractive of liability. Subsequent cases capitalized on that idea, hammering that utilization of market power breached Section 2.²⁰⁶ In *Otter Tail*, the Court found that an energy supplier’s refusal to cooperate with municipal retail constituted ‘anticompetitive uses of its dominant economic power’.²⁰⁷ And in *Aspen Skiing*, the Court endorsed the utilization interpretation of Section 2 by talking of ‘abuse of monopoly power’.²⁰⁸

The lesson to draw from these cases, to be clear, is that in Section 2, market power has not just been envisioned as the injury of bad conduct. Market power has been considered the instrument of bad conduct. That is a significant deviation from the original philosophy of the law. Initially, Section 2 could catch the broadest range of business practices. For example, conduct not utilizing market power in an economic sense like industrial espionage, below cost pricing, predatory acquisitions, and exclusionary innovation would all be covered under Section 2 of the Sherman Act. A judicial interpretation of the law requiring utilization of market power narrows its coverage to settings in which firms (i) enjoy a pre-existing base of market power; and sell or buy from competitors; or (ii) when inelastic customers who are unlikely to switch are coerced into transactions in other markets.

With eyes on market power utilization, the Court introduced a further difficulty. It will often be hard to distinguish legitimate from illegitimate use of size, scale, or other proprietary resources in the hands of a dominant firm.²⁰⁹ In *Conwood*, the Court of Appeals (6th Cir) recalled the conundrum: ‘merely because an entity has monopoly power does not bar it from taking advantage of this scale of economies because of its size’.²¹⁰ In the case law, the line drawing challenge spurred intense experimentation. The cases split into two groups. One group of cases developed economic predictors of exclusionary conduct. Amongst the variety of approaches, the consumer welfare standard – which focuses on net consumer harm, compensated or not by producer efficiency – the no economic sense or profit sacrificing test – which studies existence of higher profit maximization strategies devoid of exclusionary effects

205 See n 159). Hand talked of *Alcoa*’s ‘persistent determination to maintain [...] control’ 430.

206 In *LePage’s v 3M*, the Court read *Alcoa* as follows: ‘The court determined that *Alcoa*, which controlled over 90% of the aluminum market, had utilized its size for abuse’. See n 114.

207 *Otter Tail Power Co. v United States* 410 U.S. 366 (1973).

208 See n 151. See also the Opinion of Judge Posner in *Olympia*: it is ‘not the possession, but the abuse of, monopoly power violates Section 2’ (n 155).

209 See *Spectrum Sports, Inc. v McQuillan* 506 U.S. 447 (1993). The Court affirmed that ‘it is sometimes difficult to distinguish robust competition from conduct with long-term anticompetitive effects’(506 U.S. 459).

210 See n 117.

– and the as efficient competitor framework – which asks if conduct would eliminate a clone of the dominant firm– stand out. With exception of the consumer welfare standard, the Supreme Court antitrust jurisprudence does not appear ready to promulgate one binding test for the analysis of exclusionary conduct.

In another group of cases, the dial moved in the bad purpose direction. The *Conwood* case brings an illustration. The Court was faced with allegations that USTC, a leading tobacco supplier of a four firm oligopoly, had used its position as category manager to control and limit placement of rivals. The Court overcame the objection that the impugned conduct constituted legitimate business conduct by reviewing abundant evidence that the defendant had engaged into naked bad behavior against competitors, including through the direct use of force, ruse, dupes, and lies.²¹¹ However, many cases do not disclose wretched conduct or fraudulent facts. Critical to win the Court's conviction in *Conwood* was the fact that the defendant had engaged into 'systematic effort' against rivals, not just 'sporadic' activity. The Court held that USTC had 'sought to achieve its goals of excluding competition and competitors' products by numerous avenues'. What allowed a finding of infringement in the case also consisted in adducing evidence of additional forms of bad behaviour that did not involve utilization of market power.

Bottom line? Section 2 case law increasingly resembles EU law on abuse of dominance. The distinction of US and EU law on the ground that the former would limit the *creation* of market power, while the latter would control *existing* market power no longer holds water. In the US courts' language, Section 2 seeks as much to control practices that create monopoly, as it limits practices that 'perfect',²¹² 'regain',²¹³ or 'strengthen',²¹⁴ a base of monopoly power.²¹⁵ The assumption is that antecedence of a market power base allows safer inferences that the conduct had anticompetitive goals and/or effects. In his dissent in *Kodak*, Justice Scalia observed that '[w]here a defendant maintains substantial market power, his activities are examined through a special lens: Behavior that might otherwise not be of concern to the antitrust laws—or that might even be viewed as procompetitive—can take on exclusionary connotations when practiced by a monopolist'.²¹⁶ An alternative evolution in the case law might have consisted in adopting a market power utilization filter.

b. EU law movement towards a bad conduct emphasis

Article 102 TFEU, with its series of illustrations, embodies an abuse system. The law expressly forbids excessive utilization of a dominant position. A base of market power is a necessary condition for the application of the law. While not made invalid outright, dominant positions are regarded as worthy of supervision. Business partners and customers of dominant firms face weakened competitive options. The law on the books thus outlaws excessive usage of market power, and requires some self-restraint from dominant enterprises in their interactions with non-competitors.

211 The Court noted 'isolated tortious activity does not constitute exclusionary conduct for purposes of a Section 2 violation'. It found that beyond misuse of its position as category manager, the defendant has entered into exclusive dealing, removed racks from stores, and trained operatives to trick store employees. *ibid*.

212 *Grinnell* (n 150).

213 *Lorain Journal* (n 204).

214 *LePage v 3M* (n 114).

215 The law is interested also in conduct by firms that are incompletely or superficially dominant.

216 See *Kodak* (n 129), 488.

Early judicial interpretation reveals that the need to establish excessive market power utilization was never a strict requirement. First brought up in *Continental Can* as an answer to the objection that the buyout of a rival is not exertion of market power, the Court held that the strengthening of a dominant position ‘may be an abuse [...] regardless of the means and procedure by which it is achieved’.²¹⁷ This is certainly not in accordance with the wording of Article 102 TFEU which mentions abuse ‘of a dominant position’, not abuse ‘of a firm’ in a dominant position. The Court, however, considered that the spirit, general scheme, system, and goals of EU law justified an extension of Article 102 TFEU to any conduct detrimental to an ‘effective competition structure’.

The *Continental Can* judgment can be seen as an opening of the law towards competitors of dominant firms. The Treaty condition of utilization of market power protects the dominant firm’s trading parties, more than its rivals. But when the textual requirement of causality between dominance and abuse is removed, the law can be mobilized by competitors. The cases that followed *Continental Can* confirm this. The overwhelming majority of Article 102 TFEU cases start with complaints from competitors. Moreover, the removal of a causal link has allowed application of Article 102 TFEU to protect competition in markets other than where dominance was observed. Last, a variety of non-market practices such as sham litigation, misleading representations to public authorities and NGOs, fraudulent or violent business behaviour came within the ambit of the law.

To be sure, dominant market power did not disappear from the Article 102 TFEU picture. It only lost prominence as an instrumental element. A showing of dominance has remained necessary under two separate tests. One, dominance is necessary as a contextual element which relates to general competitive conditions in the market. Two, a showing of market power continuation, consolidation or conglomeration as a resultant of conduct has been demanded to support a finding of competitive injury.

On these two counts moreover, the Court has injected flexibility in the law. The first idea is that abuse can only take place in a setting with a firm enjoying a base of dominant market power.²¹⁸ That stable principle has been challenged in recent years. Some cases suggest that firms that were once dominant remain subject to the possibility of being found guilty of an Article 102 violation even when their market power has disappeared.²¹⁹ *Generics* is the relevant case here. The Court was asked to clarify the conditions for declaring abusive a series of pay for delay agreements concluded between a drug manufacturer and generic competitors. In full logic, the existence of a pay for delay agreement should have signaled a weakened market power position, and ruled out a finding of a dominant position. Yet, the Court, on the assumption that a dominant position existed, gave guidance on how to review the strategy of the drug manufacturer in search of a possible abuse. In essence, the Court put a dent in the idea that Article 102 TFEU applies to firms with a dominant position ‘at the time of the abuse’.²²⁰

²¹⁷ *Continental Can* (n 134).

²¹⁸ Case T102/96 *Gencor v Commission* [1999] ECR II753, para 200: ‘only the strengthening of dominant positions and not their creation can be controlled under Article 86 of the Treaty’. See also *Volkswagen* n(161): ‘before an abuse of a dominant position is ascertained, it is necessary to establish the existence of a dominant position in a given market, which presupposes that such a market has already been defined’.

²¹⁹ *Rambus* (Case COMP/38.636) Commission Decision C(2009) 7610 [2009] OJ C 30/17.

²²⁰ Robert O’Donoghue and Jorge Padilla, *The Law and Economics of Article 102 TFEU* (Bloomsbury Academic 2013).

The second idea, that is application of Article 102 TFEU is conditional on market power effects, has a troubled history. While the *Continental Can* Court saying that abuse can be established 'irrespective of any fault' pointed to a market power test, the Court qualified this deduction in the following *Hoffmann La Roche* case. Here, Roche, a dominant supplier of vitamins for the pharmaceutical, food and animal industries, had applied fidelity obligations to customers. The Commission found abuses in seven markets. The Court upheld. In defining the concept of abuse, the Court set a weak rule for anticompetitive effects. Having recalled that 'as a result of the very presence of the undertaking in question the degree of competition is weakened', the Court held abusive any conduct which 'has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition'. Why do we call the rule weak? Because read literally, the *Hoffmann La Roche dictum* means that a dominant firm operates under a duty to conduct its business in such a way that never inflicts competitive injury, even pro-competitive injury, on rivals.

The decades that followed *Hoffmann La Roche* found the Court embroiled in a semantic morass. Willing to specify a more reasonable test of effects without making the application of the law too costly and time consuming, the Court struggled to find a formula. To avoid a hard requirement of actual or past effects, the Court stated that 'likely' effects were sufficient to establish abuse. But in other cases the Court said that allegations of abuse could be sustained in cases of conduct with mere 'capability' or 'liability' of exclusionary effects. When the Court felt unable to concretely explain what all this meant, it fell back on the idea that business conduct could be deemed abusive if anticompetitive 'by its very nature'. Last, but not least, the Court repeatedly refused to subject proof of effects to a kind of appreciability requirement.²²¹

In effect, the law of Article 102 TFEU adopted a very formalistic approach. During this period, EU law was closer to strict liability regime than to a system of control of abuse. Conduct that deviated from abstract conceptions of 'competition on the merits', 'normal competition', or unspecified norms of 'objective justification' risked falling foul of the law. The Commission, with discretion over case selection, managed to discipline some excesses of the law. But in so doing, it also raised legal uncertainty.

It took about thirty years to move the law back towards a regime of regulation, and ultimately abuse. The sea change started with the publication, in 2009, of an EC document inviting a new approach to abuse of dominance. The document insisted on the necessary application of a two-pronged market power test that would only catch conduct (i) leading to the foreclosure of as efficient competitors, real or hypothetical; and (ii) consumer harm observable in increased prices, reduced output or lower innovation.²²² The case law moved in a more punctured way, but eventually adopted a test of market power injury. In *Post Danmark I*, *Intel*, and *Intel II*, the Courts established that the appropriate test consists in balancing anticompetitive and procompetitive effects, and resort to a thorough economic investigation of the facts of the case. The often under-appreciated idea here is that if a practice produces more competitive good than bad, this calls into question its intrinsic capacity to harm competition in effect, but also suspected exclusionary motives from the dominant undertaking.

4. What and Why Convergence?

²²¹ Case C-23/14 *Post Danmark A/S v. Konkurrencerådet* [2015] ECLI:EU:C:2015:651, para 73: '[F]ixing an appreciability (de minimis) threshold for the purposes of determining whether there is an abuse of a dominant position is not justified.'

²²² Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009) OJ C 45/07, para 11.

The convergence between the US and EU market power regimes is unmistakable. Both regimes focus on three similar types of market power facts. Section 1 and Section 2 law has moved to require proof of a *base* of market power close to the dominance screen applied in EU law under Article 102 TFEU and to the market share filters used in the evaluation of agreements under Article 101 TFEU. Article 102 TFEU uses a test of market power injury comparable to the idea of focusing on the monopolization outcome of bad conduct under Section 2. And Section 2 has expanded towards cases of market power utilization, while Article 102 TFEU has widened to encompass non-market power conduct.

But why did both converge? In last analysis, both US and EU laws were flawed by design. Consider US law. Section 2's ambition to prevent monopolization places the entire economy under the stricture of the law. Agencies and plaintiffs selected manageable targets for the early mobilization of the law. It was the safest bet for them to focus application efforts towards the low hanging fruit of partially, nearly, or previously monopolized markets. Similarly, literal interpretation of the words 'every' and 'contract' in Section 1 would have transformed the Sherman Act into a demented anti trade policy. As it later said in *National Soc'y of Prof. Engineers v US*, 'One problem presented by the language of § 1 of the Sherman Act is that it cannot mean what it says'.²²³ After the excessively textualist *Transmissouri Freight Association*,²²⁴ the Supreme Court was prompt to realize that the Act needed to be qualified by judicial construction, and by recourse to economic knowledge.

The same might be said about EU law. A focus on excessive, unfair, or unreasonable utilization of market power confronted courts, agencies, and plaintiffs with what Justice Holmes called in another context 'a problem that no human ingenuity [can] solve'.¹³² The Court had no other choice but to direct the law in practical directions. These aims were accomplished by extending the scope of Article 102 TFEU to exclusionary conduct. And this required a loosening of the rigid link between dominance and abuse. A less stringent test of market power effects also supplied heightened incentives to enforcement, and litigation, in a context where the law and policy was, in whatever sense, underdeveloped.²²⁵

C. Distinct Weights for Market Power in Coordinated and Unilateral Conduct Laws

The modern conception is that antitrust laws challenge market power positions achieved by combination or a single firm. But market power occupies more prominence in certain areas of antitrust law. Application of Section 1 and Article 101 TFEU demands a lower degree of market power restriction than Section 2 and Article 102 TFEU.

These differences were in a way contained in substantive law provisions. In both systems, the original statutes use language pointing out to distinct tests of competitive injury. US law distinguish a restraint of trade test under Section 1 from a monopolization test under Section 2. In Article 101 and 102 TFEU, a same dichotomy prevailed, respectively with tests of restriction of competition by object or effect and abuse of dominance. Generally, it can be said that the

²²³ *National Soc'y of Prof. Engineers v United States* 435 U.S. 679 (1978).

²²⁴ *United States v Trans Missouri Freight Association* (n 92).

²²⁵ This is contrary to Article 101, where the Court's policy was to limit the number of cases falling within the scope of the provision, and were strict tests were applied.

wording of the provisions dealing with single firm conduct appear more expressly concerned with undue market power than the provisions dealing with coordinated conduct.²²⁶

Now, for reasons already seen, this distinction has faded.²²⁷ Both sets of provisions appear to rely on market power tests. The footprint of market power in both areas of the law is more salient in US law. One reason for this might have to do with the way the cases were tried. US antitrust law has more cases brought jointly under Section 1 and 2. For reasons of practicality, as well as logic, courts might have used a common market power framing. This is less true of EU law where cases are more frequently brought under either Article 101 or 102 TFEU.

That said, important differences remain between coordinated conduct and single firm conduct law. Distinct market power tests apply in both areas. A conception that US law, and to some extent EU law, embrace is that a less stringent market power test should apply in coordinated conduct cases, compared to single firm conduct law. In *Kodak*, the Court held that 'monopoly power under Section 2 requires, of course, something greater than market power under Section 1'.²²⁸ EU case law does not contain an equally clear statement. But Guidelines adopted under Article 101(3) TFEU state that 'The degree of market power normally required for the finding of an infringement under Article [101(1)] in the case of agreements that are restrictive of competition by effect is less than the degree of market power required for a finding of dominance under Article [102]'.²²⁹

Sound reasons exist for treating coordinated and single firm conduct differently. In two opinions, the Supreme Court elucidate them. In *Copperweld*, a steel tube manufacturer and its subsidiary had been trying to discourage banks and buyers from doing business with a rival to whom they had lost a key manager. The legal issue facing the Court was whether there could be a conspiracy justiciable of Section 1 between a parent and its wholly owned subsidiary. Responding in the negative on the ground that both firms constituted in reality one entity, the Court stressed that it was consciously giving a limited license to single firm's anticompetitive restraint of trade. The Court reasoned that subjecting every action of a single firm to 'judicial scrutiny for reasonableness would threaten to discourage the competitive enthusiasm that the antitrust laws seek to promote'.

The Court, however, did not give a reason other than a textual one to justify that the standard of reasonableness under Section 1 had to be less stringent than the standard of monopoly power under Section 2. That answer was supplied years later in *Spectrum Sports*. The facts tell a family business story. The owner of polymer patents had sought to reallocate the distribution rights of derivative athletics products to a firm owned by a relative. A distributor who had been abruptly cut off started proceedings on grounds of unlawful attempt to monopolize under Section 2. Reviewing the evidence, the Supreme Court acknowledged that the case

226 In the 1940 case *Socony Vacuum* the Court pushed this idea very far, stating that 'monopoly power is not the only power which the Act strikes down'. The Court suggested avoiding 'a confusion between the nature of the offenses under those two sections'. See n 97. Note, however, that previous cases under Section 1 used to talk of 'combinations entered into to build up and perpetuate monopolies'. See *Straus & Straus v American Publishers' Ass'n* 231 U.S. 222 (1913).

227 For an example in an old case, see *Geddes v Anaconda Mining Co.* (n 108). The Court refers to a 'combination in monopoly or restraint of trade'. In a way, text law reflected this too. Both Section 2 and Article 102 TFEU envision conspiracy to monopolize, and abuse of a collective dominant position. And Article 101 TFEU places an absolute limit on agreements that eliminate all competition.

228 *Eastman Kodak Co. v Image Technical Services, Inc. et al.* (n 129). Here the Court also refers to a 'More stringent monopoly standard of section 2'.

229 Communication from the Commission — Notice — Guidelines on the application of Article 81(3) of the Treaty [2004] OJ C 101/97, para 26.

displayed facts constitutive of unfair behaviour. But was this sufficient to constitute attempted monopolization under Section 2? The Court answered in the negative. A more demanding inquiry of the defendant's 'economic power' in the relevant market is necessary. The Court added 'single-firm activity is unlike concerted activity covered by section 1', because the former 'inherently is fraught with anticompetitive risk'.

Against this background, Herbert Hovenkamp has proposed to describe the conventional wisdom that 'creating a monopoly by cooperating with rivals is much easier than destroying them'.²³⁰ The proposition rests on two ideas. First, it is less likely that monopoly power will be gained by unilateral action rather than by concerted one. Two, monopoly is less likely to be the motivational goal behind aggressive single firm conduct.

Superficially, the preceding statements are attractive. But they are, on close analysis, objectionable. As the Court held in *Matsushita*, a multi firm 'conspiracy is incalculably more difficult to execute than an analogous plan undertaken by a single predator'.²³¹ Besides, it is not all clear that it is harder to set prices and output collectively than unilaterally. Individual firms expend considerable costs trying to adjust output and price internally, in the fog of organizational bureaucracy, information asymmetries, and uncertainty from market place rivalry.

The better explanation is that collusion is just less likely to promote efficiency than monopoly.²³² Presumably, this idea led Mr Justice Scalia to write in *Trinko* that monopolization is preferable to collusion, 'the supreme evil of antitrust'.²³³ No equivalent statement exists in EU law. But a similar orientation lives too in case law. In *Expedia*, the Court implied that price fixing was to be deemed unlawful by object regardless of whether the market share covered by the agreement was *de minimis*.²³⁴

The lesser stringency of market power effects required in coordinated conduct law is, moreover, only true in so far as horizontal agreements are concerned. Compare horizontal and vertical price fixing. In *Leegin*, the Court abandoned the *per se* prohibition rule against resale price maintenance ('RPM') in favour of a market power analysis. The Court held that the proper method of evaluation of RPM was the rule of reason. The Court considered this approach justifiable in light of the tremendous amount of economic literature showing the procompetitive benefits of RPM. It added 'our recent cases formulate antitrust principles in accordance with the appreciated differences in economic effect between vertical and horizontal agreements'.

230 See Herbert Hovenkamp, *The Antitrust Enterprise: Principle and Execution* (Harvard University Press 2005) 109.

231 *Matsushita v Zenith Radio Corp.* 475 U.S. 574 (1986). The Court added that in a coordination setting, 'each conspirator has a strong incentive to cheat, letting its partners suffer the losses necessary to destroy the competition while sharing in any gains if the conspiracy succeeds. The necessary allocation is therefore difficult to accomplish' (475 U.S. 590). The view is confirmed by abundant economic literature on price leadership in oligopoly, which shows how dominant firms can induce fringe rivals to follow their pricing policy at little cost.

232 As soon as fixed costs exceed zero, concentration dominates coordination.

233 See *Verizon Communications Inc. v Law Offices of Curtis V. Trinko, LLP* 540 U.S. ____ (2003). Note though that this view has been in a way contested a century ago by Mr. Justice Brandeis in his dissent in *American Column, 1919*. See *American Column & Lumber Co. v United States* 257 U.S. 377 (1921). Brandeis suggested that some power by cooperation should be allowed, to prevent alternative incentives for acquisition of power, and monopolization, by consolidation. Contrary to the *Trinko* philosophy, Brandeis supported a softer view on coordination, to avoid the evils of monopoly consolidation.

234 The case may be compared with the final judgments handed down in *Intel v Commission*. Both the Court and the General Court insisted that dominant firm 'pricing practices' could only be deemed unlawful on the basis of a consideration of the 'share of the market covered' by the challenged practice. The *Intel* opinions reverse a previous decision in which the Court had held that that there was no need to show 'serious or appreciable' effects to establish an abuse, thus dismissing any relevance to the market coverage of the practice; Case T-286/09 RENV *Intel Corporation Inc v European Commission* ECLI:EU:T:2022:19.

Upshot? The *Leegin* Court hints that some alignment is necessary in the analytical treatment of vertical restraints by coordination and unilateral conduct.²³⁵ In contrast, the principles currently prevailing in EU law are less consistent. On the one hand, some classes of vertical agreements that maintain national price differences or that create territorial protection along national lines are *per se* unlawful. On the other hand, unilateral practices from a dominant firm with similar effects must be subject to a market power analysis.²³⁶

V. LEGAL CONCEPTIONS OF MARKET POWER

A. Introduction

Is a specific conception of market power retained in US and EU antitrust law? To answer this question, the analysis uses the economics of market power discussed above.²³⁷ The study consists in searching, and comparing, where each antitrust law stands relative to approaches to the definition of market power in economics.

Recall that four market power definitions can be used as benchmarks. The first definition is the non-technical view of market power as a situation in which buyers have no alternatives. The second definition set forth the idea that a seller with market power faces a downward sloping demand curve, so that it sets prices independently of buyers compared to the competitive world. The third definition describes the neoclassical conception of market power as an outcome in which prices are above the costs of production. The fourth definition emphasises market power as control over market, and industry output.

A study of how antitrust systems define market power should also consider where the law sets boundaries to the concept. To that extent, a review of how courts treat price effects that economics refuse to consider as market power is helpful.

B. Economic Interpretation of Market Power under US Law

The definition of market power used in US antitrust law fits with an economic understanding of the concept. Two conceptions dominate the cases. The first is a view of market power centred on the ability to raise price above the competitive level.²³⁸ In *Fortner*, a Section 1 and 2 case about *US Steel's* tying of loans to purchase of prefabricated houses, the Court described its understanding of market power in terms of the falling demand curve introduced by Cournot as follows:

235 See *Leegin Creative Leather Products, Inc. v PSKS, Inc.* 551 U.S. 877 (2007). In discussing vertical restraints, the Supreme Court stated by way of *dictum* that the 'economic effects of unilateral and concerted price setting are in general the same'. The Court considers that it is irrelevant whether a manufacturer enforces a resale price by way of contract or by refusing to deal with retailers who do not follow its suggested prices.

236 Joined cases C-468/06 to C-478/06 *Opinion of Mr Advocate General Ruiz-Jarabo Colomer delivered on 1 April 2008 Sot Lélos kai Sia EE and Others v GlaxoSmithKline AEVE Farmakeftikon Proïonton, formerly Glaxowellcome AEVE* [2008] I-07139/7144.

237 As *tertium comparationis*. See John C Reitz, 'How to Do Comparative Law' (1998) 46 *The American Journal of Comparative Law* 617.

238 In *NCAA v Board of Regents*, the Court held that 'Market power is the ability to raise prices above those that would be charged in a competitive market'. The Court referred to its prior case law in *Jefferson Parish*, but this reference is unconvincing, because in this case, the Court decided to condemn another form of economic power. See *NCAA v Board of Regents* (n 188); *Jefferson Parish Hosp. Dist. v Hyde* (n 157). In *Copperweld*, the Court, at footnote 9, talked of 'the ability to raise prices above those that would be charged in a competitive market.' *Copperweld Corp. v Independence Tube Corp* (n 189).

Market power is usually stated to be the ability of a single seller to raise price and restrict output, for reduced output is the almost inevitable result of higher prices. Even a complete monopolist can seldom raise his price without losing some sales; many buyers will cease to buy the product, or buy less, as the price rises.²³⁹

But ‘Cournotism’ was already present in older opinions whose wording showed interest towards price.²⁴⁰ Many cases concerned themselves with problems arising from situations of monopolies that ‘fix’ price,²⁴¹ or ‘control’ price.²⁴² In *International Harvester*, the Court wrote that influence over price defines power. The combination, said the Court, ‘controlled or dominated the harvesting machinery industry by the compulsory regulation of prices’.²⁴³ Later opinions added that the power to raise prices was a problem compared to the situation that could be expected in a competitive market.²⁴⁴

The second conception gives more weight to power over output. Power over price still matters. But it is looked at as an implication of control over output, which becomes the decisive element. *Standard Oil* gives an illustration. The case saw the Court dismiss charges of unlawful monopoly against a patent pooling, cross licensing and royalty sharing scheme over oil cracking technology. The Court considered that short of ‘control of supply’ of cracked gasoline – the members of the pool enjoyed 55% of oil cracking capacity – no power to fix price could ever result from a licensing agreement, regardless of its sophistication. The Court suggested that for such power to arise, the parties should have controlled ‘through some means, the total gasoline production from *all sources*’. Learned Hand repeated the same idea a few years later in *Alcoa*: ‘It is only when a restriction of production inevitably affect prices, or is intended to do so, that it violates S1 of the Act’.²⁴⁵

In contrast, few antitrust cases endorse the neoclassical idea that deviations from marginal cost pricing constitute the definitional touchstone of market power.²⁴⁶ Similarly, the case law at best occasionally refers to a non-technical idea of market power as one of ‘freedom’ of trade.²⁴⁷

239 See *Fortner Enterprises, Inc. v United States Steel Corp.* 394 U.S. 495 (1969). The cited definition of market power can be retrieved at 394 U.S. 503.

240 We borrow this expression from Hicks (n 62).

241 *Appalachian Coal* (n 96).

242 *Trenton Potteries* (n 108).

243 *Int Harvester Co* (n 105). The Court wrote: ‘in fact controlled or dominated the harvesting machinery industry by the compulsory regulation of prices’ (274 U.S. 708).

244 See *Eastman Kodak Co.* (n 129). The Court defines market power as the power ‘to force a purchaser to do something that he would not do in a competitive market’. See also in the lower courts, e.g. in *LePage’s v 3M*, where the Court wrote: ‘Once a monopolist achieves its goal by excluding potential competitors, it can then increase the price of its product to the point at which it will maximize its profit. This price is invariably higher than the price determined in a competitive market. That is one of the principal reasons why monopolization violates the antitrust laws’. See n 114.

245 *Alcoa* (n 144).

246 See, for example, *FTC v Indiana* (n 176). Here, the Court suggested that a competitive market is one with ‘ability’ to ‘advance social welfare by ensuring the provision of desired goods and services to consumers at a price approximating the marginal cost of providing them’.

247 *United States v Colgate & Co.* 250 U.S. 300 (1919): ‘The purpose of the Sherman Act is to prohibit monopolies, contracts and combinations which *probably* would unduly interfere with the free exercise of their rights **by** those engaged, or who wish to engage, in trade and commerce’(250 U.S. 307); *Eastman Kodak Co. v Southern Photo Materials Co.* 273 U.S. 359 (1927): ‘the plaintiff being thus deprived, by reason of the monopoly, of the ability to obtain the defendant’s goods and supply them to its trade, its business had been greatly injured’(273 U.S. 369); *Kiefer-Stewart Co. v Seagram & Sons, Inc.* 340 U.S. 211 (1951): the Act forbids through its contract with each distributor. Interstate was able to acquire the control and impose its will

Two additional details of considerable significance allow a claim that US jurisprudence endorses a modern conception of market power. First, the Court considers that power over price is the dependent variable of power over output. To see this, it is necessary to realize that many old cases used to define market power in terms of power over price *or* control over output. In *Appalachian Coals*, for example, the Court talked of establishing ‘monopoly control of a market or power to fix monopoly prices’.²⁴⁸ Hay has underlined the economic problem of this approach as follows:

The definition suggests that there are two different possible tests for monopoly power and that a firm will have monopoly power if either is satisfied. For the economist, however, the power to control prices in any meaningful way depends on the absence of competition [...].²⁴⁹

Now some opinions from the Supreme Court had tackled this ambiguity by making price, plus control of output (or competition) a key condition for a showing of market power. In 1927, in *Cline v Frink Dairy*, the Court had talked of the ‘power to control the market and to fix arbitrary and unreasonable prices’.²⁵⁰ Closer to present times, the *Jefferson Parish* Court defined market power as ‘the ability of a single seller to raise price and restrict output’.²⁵¹

But the replacement of ‘or’ with ‘and’ added further confusion. In *du Pont*, the Supreme Court discussed market power in terms of a reciprocal influence saying that ‘it is inconceivable that price could be controlled without power over competition or vice versa’.²⁵² The beginning of the *dictum* is right. The end is not. No economist would consider that power over competition comes from power over price.²⁵³ What is the conventional understanding? Power over price might be indicative of power over competition because it requires control over output.²⁵⁴ But no further inference can be drawn. Besides, inferences from high prices are confounding. Any price increase will tend to weaken power over competition by raising incentives to entry or expansion.

Today, the case law has dissipated most doubts by replacing ‘or’ and ‘and’ with ‘by’. In *Amex*, the Court defined market power as ‘the ability to raise price profitably *by restricting output*’.²⁵⁵

by force of its monopoly of first-run theatres in the principal cities of Texas and the threat to use its monopoly position against copyright owners who did not yield to its demands’(306 U.S. 228); *NYNEX Corp. v Discon, Inc.* 525 U.S. 128 (1998): ‘The freedom to switch suppliers lies close to the heart of the competitive process that the antitrust laws seek to encourage’(525 U.S. 137). agreements ‘which cripple the freedom of traders’, and ‘ability to sell according to their own judgment’(340 U.S. 213); *Interstate Circuit* (n 129): the Court looks at is IC imposing on film distributors to raise price over subsequent run movies, and this *coercion* defines monopoly power, ‘The restrictions imposed upon Interstate’s competitors did not have their origin in the voluntary act of the distributors or any of them. They gave effect to the will and were subject to the control of Interstate, not by virtue of any copyright of Interstate, for it had none, but

248 See *Appalachian Coal* (n 96); See also, *Geddes v Anaconda Mining Co.* (n 108), where the Court talked of the control ‘of production or prices’.

249 George A Hay, ‘Market Power in Antitrust’ (1992) 60 Antitrust Law Journal 807.

250 *Cline v Frink Dairy Co.* 274 U.S. 445 (1927).

251 *Jefferson Parish Hosp. Dist. v Hyde* (n 157).

252 *United States v E. L du Pont de Nemours & Co.* 351 U. S. 377 (1956), 391.

253 Unless one engages in a rhetorical understanding of power over price as the ability to set prices below costs.

254 In *Olympia*, Judge Posner described this inference as follows: a ‘steep increase in the price’ that does not cause switching can be seen as ‘implying low elasticity of demand ... and therefore monopoly power’. See *Olympia* (n 155).

255 *Amex* cites scholarship, and sections in previous opinions in *Kodak* and *Business Electronics*. But in *Kodak*, the Court did not really define market power by reference to price control by restriction of output (but by comparison to what a firm would do in a competitive market. See *Amex* (n 176); *Eastman Kodak Co. v Image Technical Services, Inc. et al.* (n 129). And in

The case shows that emphasis on output is not just merely a lawyer's terminological quarrel. With eyes on output, the Court observed historical growth of credit card transactions. This fact was relevant to counter allegations that American Express had breached Section 1 by preventing merchants to steer shoppers towards other payment cards.²⁵⁶

The *Amex* definition of market power appears to be good law.²⁵⁷ In *NCAA*, the Supreme Court found that the *NCAA* power over price was uncontroversial given the fact that 'students athletes had nowhere else to sell their labor'.²⁵⁸ The Court observed a situation of complete control over output. It inferred power over price. The lower courts are aligned. In *Ball Memorial Hospital*, the Court of Appeals (7th Cir) wrote that '[m]arket power comes from the ability to cut back the market's total output and so raise price'.²⁵⁹

The second detail is that in US law, market power does not cover any price increase situations. Recall that since very early, the Court has tried to avoid constructing the Sherman Act in ways that would reach 'normal and usual contracts incidents'.²⁶⁰ The same concern of reasonable construction has governed the jurisprudential definition of market power. According to the Supreme Court, prices over costs caused by product differentiation do not constitute antitrust market power. In *du Pont*, the Court said that 't[he] power that let us say, automobile or soft-drink manufacturers have over their trademarked products is not the power that makes an illegal monopoly'.²⁶¹ The same exclusion applies to price increases arising from demand shocks. In *Brooke Group*, the Court held that '[i]f prices rise in response to an excess of demand over supply [...] the market is functioning in a competitive manner. Consumers are not injured from the perspective of the antitrust laws by the price increases; they are in fact causing them'.²⁶²

In conclusion, it can be said that US antitrust law adopts an economic definition of market power. The definition is in essence close to Cournot's, but in application tends to focus on control of output. By contrast, the very limited reference to 'price above marginal costs' as a definitional element of market power will strike an economically minded reader of the case law.

Business Electronics, there is no straight reference to this issue. See *Bus. Electronics v Sharp Electronics Corp.* 780 F.2d 1212 (5th Cir. 1986).

In *Fortner*, cited in *Kodak*, the Court talked of raising price 'and' output. See *Fortner Enterprises, Inc. v United States Steel Corp.* (n 239).

²⁵⁶ *Amex* (n 176).

²⁵⁷ *ibid.* See also, *Ball Memorial Hospital, Inc. v Mutual Hospital Insurance, Inc.* 784 F.2d 1325 (1986), 1335. 'Market power comes from the ability to cut back the market's total output and so raise price.'

²⁵⁸ *NCAA v Alston* 141 S. Ct. 2141 (2021).

²⁵⁹ *Ball Memorial Hospital, Inc. v Mutual Hospital Insurance, Inc.* 784 F.2d 1325, 1335 (1986).

²⁶⁰ *Eastern Lumber Ass'n v US* (n 125): 'its proper construction the act was not intended to reach normal and usual contracts incident: to lawful purposes and intended to further legitimate trade'. See also, and more generally, *United States v Hopkins* 427 U.S. 123 (1976): 'The act of Congress must have a reasonable construction or else there would scarcely be an agreement or contract among business men that could not be said to- have, indirectly or remotely some bearing upon interstate commerce, and possibly to restrain it. We have no idea that the act covers or was intended to cover such kinds of agreements.'. From the very beginning, the Court refused effects which were too 'remote', 'not intended', and 'too small' under the act.

²⁶¹ *United States v E. I. du Pont de Nemours & Co.* (n 252).

²⁶² See n 200, 232.

C. Autonomous Notions of Market Power in EU Law

EU law is characterized by conflicting definitions of market power. On the one hand, the EU courts have followed an original interpretation of the term '*dominant position*' that has casual connection with the economic definitions of market power. On the other hand, the Commission and EU lawmakers have adopted a conception of Article 101 and 102 TFEU that draws inspiration from economic definitions of market power.

Judicial interpretation is discussed first. As if market power, and monopoly power, were taboo, the terms almost never appear in the case law. So if the Court does not expressly mention market power, what does it talk about when it talks about dominance?

In *United Brands*, the Court defined a 'dominant position' as follows:

a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.²⁶³

The definition is long. Its wording is not economic. There is no reference to the terms of art used in the market power literature like 'price', 'cost', 'profits', or 'output'. When words like 'effective', 'independently', and 'appreciable' suggest measurement, no benchmark is provided. The main connection with market power concepts is a reference to 'economic strength' or 'economic power'.

In subsequent cases, the Court elaborated on its doctrine on dominance. A constant in the case law has been that the economics of market power is never expressly acknowledged.²⁶⁴ Instead, the Court has appeared willing to develop its own conception of 'dominant position'. The result is a definition that focuses on independence from competitors, on absence of alternatives for customers, or on advantages of the dominant firm. Sometimes all are relevant. The three alternatives will be considered in turn.

The most often encountered definition of dominant position in the cases concerns itself with 'independence'.²⁶⁵ Some clarity was added in *Hoffmann La Roche*, where the Court said that an absence of pricing 'pressure' characterizes dominance.²⁶⁶ In *Michelin I*, the Court repeated that a decisive element of dominance consists in conducting itself to a large extent without having to take account of competition.²⁶⁷ Concepts of independence, freedom of action, and

²⁶³ See n 167, para 81. In *Michelin I* (n 164), para 30, the Court affirms that a dominant position 'enables [the firm holding] it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors and customers and ultimately of consumers'.

²⁶⁴ Some like to see in this a sign of autonomy of the law. But it is hard to see concretely what gains one can derive from intellectual disciplinarity.

²⁶⁵ In *Hoffmann La Roche*, the Court also said that is the '*the special feature of a dominant position*' is '*freedom of action*'. See Case 85/76 *Hoffmann-La Roche & Co AG v Commission of the European Communities* [1979] 1979 -00461/464, para 41.

²⁶⁶ *ibid.* The Court stated that 'the fact that an undertaking is compelled by the pressure of its competitors' price reductions to lower its own prices is in general incompatible with that independent conduct which is the hallmark of a dominant position'. The Court stated additionally that no 'competitive pressure' was 'likely to jeopardize the market degree of independence'. Note, however in *Michelin I*, the statement whereby, in response to the argument that 'Since 1979 Michelin NV has made a loss.', the Court said that ('temporary unprofitability or even losses are not inconsistent with the existence of a dominant position. By the same token, the fact that the prices charged by Michelin NV do not constitute an abuse and are not even particularly high does not justify the conclusion that a dominant position does not exist'. *Michelin I* (n 164), para 59.

²⁶⁷ See *Michelin I* (n 164), para 48. The case concerned discounts granted by a leading supplier on the Dutch market for replacement tyres for heavy vehicle. On account from competition from retread tyres, the Court added that a '*complete*

limited pressure are not totally detached from economics. As Franklin Fisher once observed, monopoly power is the ‘ability to act in an unconstrained way’.²⁶⁸ Concretely, the judicial concept of dominance appears to cover a range of situations spanning monopoly and oligopoly structures with fringe competitors.

Another definition in the case law focuses on the idea that the dominant firm is an ‘unavoidable trading partner’. In multiple judgments, that Court has emphasized that customers (or suppliers) of a dominant firm are forced into economic transactions.²⁶⁹ They have no ability to switch entirely to alternative products, to delay or withdraw purchases, or to self-supply. That conception of dominant power in terms of coercion of customers resembles the monopoly concerns expressed in classical economics works.

A last definition centred on ‘economic strength’ rests on firm level advantages. In *United Brands*, the Court noted in conclusion that the ‘cumulative effect of advantages makes a dominant position’.²⁷⁰ In *AKZO*, the Court singled out the defendant’s ‘most highly developed marketing organization both commercially and technically, and [its] wider knowledge than that of their competitors with regard to safety and toxicology’.²⁷¹

Only in rare cases has an idea of control over output been endorsed. *Continental Can* is one of them. The Court suggested that once a firm had strengthened its dominant position by means of abuse, it was able to make life or death decisions about competitors.²⁷²

Occasionally, the Court has used non-economic concepts to designate high levels of dominance. The expression ‘economic dependence’ often connotes dominant market power.²⁷³ More recently, the General Court discussed Google’s position in general search engine services in terms of ‘super’ dominance.²⁷⁴

The EU courts’ conception of dominance in terms independent from economics is mysterious.²⁷⁵ From a historical standpoint, the market power literature was well-developed when the Treaties that contain the basic EU antitrust rules were drafted. As seen previously,

absence of competition’ needed not be present to establish dominance, just ‘*partial competition*’.

268 Franklin M Fisher (n 7) 677.

269 The cases are too numerous to mention here. Among them, see *Hoffmann La Roche* talking of ‘unavoidable trading partner’. *Hoffmann La Roche* (n 265), para 41. And see also, Case T-219/99 *British Airways plc v Commission of the European Communities* [2003] II-05917/5925, para 75, in which the Court talks of ‘unavoidable business partner’.

270 See n 167, para 129.

271 Case C-62/86 *AKZO Chemie BV v Commission of the European Communities* [1991] I-03359/3362, para 61. See also *Michelin I* (n 164) para 58, where the Court insisted on the defendant’s lead over its competitors in relation to ‘investment and research’, its ‘range of products’, and the ‘efficiency and quality’ of its dealer network.

272 See *Continental Can* (n 134), para 26: ‘Abuse may therefore occur if an undertaking in a dominant position strengthens such position in such a way that the degree of dominance reached substantially fetters competition, i.e. that only undertakings remain in the market whose behaviour depends on the dominant one’. If this is the case, then the dominant position that pre-exists to the abuse implies some lesser control, that is not necessarily existential, over competitors.

273 Case C-226/84 *British Leyland Public Limited Company v Commission of the European Communities* [1986] 1986-03263/3264 para 9; Case C-583/13 P *Deutsche Bahn AG and Others v European Commission* [2015] ECLI:EU:C:2015:404, para 57.

274 Case T-612/17 *Google LLC, formerly Google Inc and Alphabet, Inc v European Commission* [2021] II-03601.

275 In 2007, the General Court accepted a description of *Microsoft’s* grip on the PC market as a ‘*quasi-monopoly*’. Case II-03601/3619, para 775. See also, for a previous case, Case C-333/94 *Tetra Pak International SA v Commission* [1996] E.C.R. I-5951, para. 31. Also, the jurisprudence on collective dominance also appears to draw inspiration from game theo-

compared to US law, the language of the EU provisions is more economic. Moreover, the judicial institution in charge of interpreting the Treaty of Paris that preceded the EU treaties had come close to an economic definition of market power. A 1960 judgment about a joint agency agreement for the selling of coal amongst West German mines stated that:

[t]he power to determine prices, however, resides in a power, given to the undertaking in a position to exercise it, to establish prices at a level appreciably different from that which would be established by the effects of competition alone.²⁷⁶

The judgment also held that the power to determine prices was commensurate with the ‘*mass of production*’ under internal control of the combination, and was inversely related to the weight of external competition.²⁷⁷

As hinted above, the Court’s autonomous definition of dominance is also inconsistent with legislative and policy developments. In sectoral telecommunications regulation, EU lawmakers started in the 2000s to explicitly discuss dominance in terms of ‘significant market power’.²⁷⁸ In December 2005, the Directorate General for Competition of the European Commission published a ‘Discussion Paper’ on the application of Article 82 EC, now 102 TFEU, to exclusionary abuses. Attempting to breathe economics in the legal concept of independence, the Paper stated that ‘[f]or dominance to exist the undertaking(s) concerned must not be subject to effective competitive constraints. In other words, it thus must have substantial market power’.²⁷⁹ In a following 2009 Guidance Paper on exclusionary abuse, the Commission framed dominance as a market power issue, and defined it as the capacity to ‘profitably increase[e] prices above the competitive level for a significant period of time’.²⁸⁰ A similar understanding prevails under Article 101 TFEU. The first texts that introduced an economic approach in this area of the law in the end 1990s referred to market power.²⁸¹ In 2004, the EU Guidelines on

retic insights, but the cases are extremely rare. See Nicolas Petit, ‘The Oligopoly Problem in EU Competition Law’ in Ioannis Liannos and Damien Geradin, *Research Handbook in European Competition Law* (Edward Elgar 2013).

276 Case no 13-60 ‘*Geitling*’, *Ruhrkohlen-Verkaufsgesellschaft mbH and others v High Authority of the European Coal and Steel Community* [1962] 83. The Court wrote: ‘Thus, to show the existence of a power to determine prices, it is necessary to establish that the actual prices are, or could be, different from what they would have been in the absence of any power to fix prices. Such a proposition involves a subtle comparison between the actual and the potential, of a kind which must rest to a considerable extent on informed speculation’.

277 A similar economic understanding of monopoly power was pushed forward in a 1966 Memorandum of Concentration in the Common Market commissioned by the Commission. The authors wrote that a monopoly position ‘*leads to a limitation of production, so that profits are maximised through prices above the level that would prevail in an oligopolistic market, where output levels would be higher*’ (free translation of une situation de monopole ‘...conduit souvent à limiter la production, de telle sorte qu’il y a maximalisation des profits, obtenue par des prix qui se situent à un niveau plus élevé que ce ne serait le cas dans un marché oligopolistique qui, lui, conduirait à un niveau de production plus élevé’). See Etudes ‘Le Problème de la Concentration dans le Marché Commun’ (1966) 3 Series Concurrence 26.

278 See Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, (2002) O.J. L 108, Art. 14(2), which provided: ‘An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers’.

279 DG Competition ‘Discussion Paper on the Application of Article 82’ (2005), retrieved at <https://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>.

280 Communication from the Commission — Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (n 222).

281 See Commission Regulation (EC) No 2790/1999 of 22 December 1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices (1999) OJ L 336/21, para 7, 13.

Article 101(3) discussed the impact of anticompetitive agreements in terms of market power effects.²⁸²

Today, the lack of a single definition of dominance based on economics can be contrasted with the economically-minded opinions of the Court in *Post Danmark I* and *Intel*.²⁸³ The law on single firm conduct moves towards economics when the Courts interpret the concept of abuse. But it remains quite 'esoteric' when the focus is on dominance.²⁸⁴ The result is a mixed approach.

VI. PROOF AND EVIDENCE OF MARKET POWER

Application of substantive antitrust law requires proof of market power facts on the evidence. The cases tend to infer purpose or effect from three types of market power facts (A). And what sort of evidence can, prove a market power fact (B)? The questions are addressed in turn.

A. Market Power Facts

1. Three Main Market Power Facts

Three types of market power facts can be relevant to a violation of antitrust law. The first is a market power *base*. An antitrust agency or court can use a market power base as a screen for anticompetitive purpose or effect. A market power base throws contextual light on anticompetitive motives.²⁸⁵ Further, lasting injury to consumers can be inferred from a market power base.²⁸⁶

The second is market power *utilization*. An antitrust agency or court will determine whether control over output has been deployed to exploit trading parties or exclude rivals.²⁸⁷ Market

282 The Guidelines give a comprehensive account of market power that covers most of the definitions encountered previously. See Communication from the Commission — Notice — Guidelines on the application of Article 81(3) of the Treaty (2004) OJ C 101/97, para 25: 'Negative effects on competition within the relevant market are likely to occur when the parties individually or jointly have or obtain some degree of market power and the agreement contributes to the creation, maintenance or strengthening of that market power or allows the parties to exploit such market power. Market power is the ability to maintain prices above competitive levels for a significant period of time or to maintain output in terms of product quantities, product quality and variety or innovation below competitive levels for a significant period of time. In markets with high fixed costs undertakings must price significantly above their marginal costs of production in order to ensure a competitive return on their investment. The fact that undertakings price above their marginal costs is therefore not in itself a sign that competition in the market is not functioning well and that undertakings have market power that allows them to price above the competitive level. It is when competitive constraints are insufficient to maintain prices and output at competitive levels that undertakings have market power within the meaning of Article 81(1)'.

283 See *Post Danmark I* (n 221) and *Intel* (n 234).

284 See Michel Waelbroeck and Aldo Frignani, *European Competition Law* (Transnational Publishers 1999).

285 In *AKZO*, the Court held that 'a dominant undertaking has no interest in applying such [below cost] prices except that of eliminating competitors so as to enable it subsequently to raise its prices by taking advantage of its monopolistic position'. See n 271, para 71.

286 Though rendered in a merger context, the *General Dynamics* opinion explains this well: 'In most situations, of course, the unstated assumption is that a company that has maintained a certain share of a market in the recent past will be in a position to do so in the immediate future'. The Court added that firms' 'past performances imply an ability to continue to dominate with at least equal vigor'(415 U.S. 501). For the full case, see *United States v General Dynamics Corp.* 415 U.S. 486 (1974).

287 For example, in *Interstate Circuit*, the Court noted that a powerful theatrical exhibitors of movies in the main cities of Texas 'was able to acquire the control and impose its will by force of its monopoly of first-run theatres [...] and the threat to use its monopoly position against copyright owners who did not yield to its demands'. See n 129, 228. Similarly, EU

power utilization happens, for example, if a multi-product firm forces inelastic demand in product A to purchase its output in product B.

The third is a market power *injury*. To establish a harm under the consumer welfare standard that guides the practical application of US and EU law, an antitrust agency or court will focus on market power harms.²⁸⁸

Considerable differences exist between US and EU law in relation to market power facts. In EU law, a market power base will allow an inference that pricing below cost is intentionally and consequentially predatory. This is not the case in US law, which does not cover market power utilization ‘by merely enhancing the price’ of a product.²⁸⁹ EU law, however, covers acts of monopolistic exploitation, though enforcement has historically been limited.²⁹⁰ Last, both US and EU law assume market power injury in aftermarkets, upon proof of dominance in primary markets.²⁹¹

Antitrust regimes use proxies of *power* and/or *structure* for market power facts. In the case of power, the problem of proof consists in establishing a degree of influence on price.²⁹² In the case of structure, the problem of proof consists in establishing market ‘control’, or ‘dominance’²⁹³ or monopoly.²⁹⁴

US antitrust law allows a fact finder to establish a market power fact by scrutiny of *power* or *structure*. In *Appalachian Coals*, the Court talked of the ‘control of a market or power to fix monopoly prices’.²⁹⁵ In *Fortner*, a similar idea was expressed with indiscriminate reference to standards of ‘sufficient economic power’, ‘dominant position’ or ‘monopoly’.²⁹⁶ In *Amex*, the

law is concerned that strong distributors with market power may ‘be able to force/convince one or more suppliers to fix their resale price above the competitive level’ European Commission, Guidelines on Vertical Restraints [2010] OJ C 130/1 63.

288 US law tends to use the concept of market power as a workable surrogate for anticompetitive effects. Though in *Actavis*, the Court hinted that market power covers effects narrower than anticompetitive effects, by enumerating as traditional factors of antitrust analysis, ‘anticompetitive effects, redeeming virtues, market power, a potentially offsetting legal considerations’. See *Fed. Trade Comm’n v Actavis, Inc.* 570 U.S. 136 (2013).

289 In *Jefferson Parish*, the Court drew a line between the ‘exploitation of market power by merely enhancing the price of the tying product, on the one hand, and by attempting to impose restraints on competition in the market for a tied product, on the other’. Utilization of market power is only unlawful when exclusionary. See n 157.

290 Case C-177/16 *Autortiesību un komunikēšanās konsultāciju aģentūra / Latvijas Autoru apvienība v Konkurences padome* [2017] EU:C:2017:689.

291 As far as US law is concerned, see *Eastman Kodak Co. v Image Technical Services, Inc. et al.* (n 129). As far as Europe is concerned, see Case C-56/12 P *European Federation of Ink and Ink Cartridge Manufacturers (EFIM) v European Commission* [2013] ECLI:EU:C:2013:575. The Court adopted a presumption of dominance, which can be ruled out if competition in primary markets exist under four conditions identified in the case. See also Case T-427/08 *Confédération européenne des associations d’horlogers-réparateurs (CEAHR) v European Commission* [2010] II-05865/5870.

292 In *Alcoa*, Learned Hand acknowledged ‘certain limits’ to the power of a monopolist, consisting in the ‘expansion of small producers’ or in the costs of ‘keeping idle any part of a plant or of personnel’. See n(155).

293 *US v Standard Oil* talks of ‘dominancy’. See n(105).

294 The Court is not always clear on the meaning to give to monopoly. In *Grinnell*, it held that ‘domination or control of it makes out a monopoly’. See n(147). But in *US v Knight*, the Court appeared to define a ‘monopoly’ as a single supplier. See n(89).

295 *Appalachian Coals* (n 96), 359.

296 *Fortner* (n 239).

Court blurred the clarity of the principle. In a *dictum*, the Court implied that the rule of reason implied a facts specific assessment of ‘market power and market structure’.²⁹⁷

EU antitrust law appears to place stronger emphasis on structural proxies. As far as a market power base is concerned, the preference for structural proxies can be seen in the mention of dominant position in Article 102 TFEU. Structural proxies also dominate inquiry of market power injury. In *Intel*, a case celebrated for its embrace of the effects-based approach, the Court mostly pointed out to six structural factors for the analysis of exclusivity enhancing rebates: extent of the dominant undertaking market position, share of market covered by the challenged practice, conditions governing the grant of the rebates, duration, amount, and possible exclusionary aim.²⁹⁸

2. Subsidiary Fact: The Relevant Market

US and EU antitrust law require market power facts to be assessed by reference to a ‘relevant market’. The relevant market is a subsidiary fact specific to antitrust law.²⁹⁹ The history, meaning, and practice of the ‘relevant market’ in both legal systems are reviewed next.

a. US law

The Sherman Act invites fact finders to search for market power in ‘any part’ of commerce. A requirement is that ‘existence of competition is a fact disclosed by observation, rather than by the processes of logic’, added the Court in *International Shoe Company*.³⁰⁰ So where in the economy should fact finders turn their eyes when they look for competition or market power?³⁰¹

The answer is in the question. Antitrust laws’ unit of analysis is the market. But what exactly is the market over which the power or position of an antitrust defendant has to be evaluated?³⁰² Plausibly conscious of the subjectivity of the issue, the Court in *Appalachian Coals* warned that the application of the statute should ‘not to be determined by arbitrary assumptions’.³⁰³ In *Alcoa*, Learned Hand echoed the problem, writing that there were ‘various ways of computing

²⁹⁷ *Amex* (n 176). In *Kodak*, for example, the Court redundantly found that a printer manufacturer with a monopoly position on the relevant parts market had actually engaged in conduct with market power effects on consumers. *Eastman Kodak Co. v Image Technical Services, Inc. et al.* (n 129).

²⁹⁸ *Intel* (n 234).

²⁹⁹ In *Astra Zeneca*, the EU General Court stressed that the meaning of the concept differs from its conventional use in economics, law, and social sciences. See Case C457/10 P *AstraZeneca AB and AstraZeneca plc v European Commission* [2012] ECLI:EU:C:2012:770, where the Court affirmed that ‘the concept of a relevant market is different from other definitions of markets often used in other contexts, such as the area in which companies sell their products or, more broadly, the industry or sector to which the companies belong’.

³⁰⁰ *International Shoe Co. v FTC* 280 U.S. 291 (1930).

³⁰¹ In *Standard Oil*, the Court acknowledged the geographic and distributive significance of this inquiry. But the Court abstractly instructed a search for market power in relation to ‘classes of things’. *Standard Oil Co. of N.J. v United States* (n 107).

³⁰² In the formative era, the Supreme Court considered industry level market shares to establish monopoly. The *Swift & Co. v United States* 286 U.S. 106 (1932) provides an illustration. The Court lumped meat, fish, vegetables, either fresh or canned, fruits, cereals, milk, poultry, butter, eggs, cheese ‘and other substitute foods ordinarily handled by wholesale grocers or produce dealers’ in a same market.

³⁰³ See n 96. The Court added: ‘It is therefore necessary in this instance to consider the economic conditions peculiar to the coal industry [...]’ (288 U.S. 360).

Alcoa's control of the aluminium market – as distinct from its production', 'depending upon what one regards as competing in that market'.³⁰⁴

A first attempt to deal with the problem subjectivity issue appeared in *Columbia Steel*. The US Government was trying to block *US Steel's* acquisition of the largest steel supplier of the West coast. The Court supplied a first holding that one ought to 'delimit the market in which the concerns compete', and then to 'determine the extent to which the concerns are in competition in that market'.³⁰⁵

The elaboration of a complete method of market definition came, however, in *du Pont*. The Court had to decide whether *du Pont's* 75% share of US cellophane trade was unlawful monopoly under Section 2. A previous ruling had found that 'competition from [...] other materials prevented *du Pont* from possessing monopoly powers'. The Court said that the true test of competition lied in 'considering what is the relevant market', and that 'no more definite rule can be declared than that commodities reasonably interchangeable by consumers for the same purposes make up that 'part of the trade or commerce''. In practice, the resolution of this issue, said the Court, 'called for an appraisal of the 'cross-elasticity' of demand in the trade'.³⁰⁶

The legacy of *du Pont* is controversial. The issue is not so much with the adoption of a rule of interchangeability for purposes of market definition. There is strong support to this idea, even with opponents to market definition device in antitrust application.³⁰⁷ Rather, the issue is with the application of a test of cross elasticity to an existing monopoly firm. In *du Pont*, the Court held on the facts that a market for all wrapping materials existed, stressing the '[g]reat sensitivity of customers in the flexible packaging markets to price or quality changes' prevented *du Pont* from possessing monopoly control. But perhaps, this was only true because *du Pont* was already charging the monopoly price, and demand was more elastic at this level. Economists discuss this problem in terms of the 'cellophane fallacy'.

Besides, important ambiguities remain in the interpretation of market definition doctrine. Is market definition a necessary step that conditions the validity of a market power evaluation? Is this true in relation to both Section 1 and 2?³⁰⁸ In Section 2 cases, the Court has required an inquiry into the relevant product and geographic market.³⁰⁹ But in Section 1 cases, doctrine is confused. While application of the rule of reason appears to require a market definition,³¹⁰ the doctrine in relation other categories of analysis like the quick look rule or the *per se* prohibition

304 See n 159.

305 See n 99.

306 See *du Pont* (n 252), 393.

307 Like, for instance, Kaplow (n 114).

308 Note that in merger cases, the Court has held that market definition was a necessary predicate. See *Brown Shoe* n(116). In that case, the Court held: 'Thus, again, the proper definition of the market is a 'necessary predicate' to an examination of the competition that may be affected by the horizontal aspects of the merger'(370 U.S. 335). At this regard, see also *Pabst Brewing* n(119).

309 See *Spectrum Sports*: In Section 2 the Court 'requires inquiry into the relevant product and geographic market and the defendant's economic power in that market'. See n(204).

310 On the rule of reason, see *Chicago Board of Trade v United States* 246 U.S. 231 (1918): 'The effects of the rule: As it applies to only a small part of the grain shipped to Chicago and to that only during a part of the business day and does not apply at all to grain shipped to other markets, the rule had no appreciable effect on general market prices; nor did it materially affect the total volume of grain coming to Chicago'(246 U.S. 240).

rule is chaotic.³¹¹ A *dictum* in *Broadcast Music v CBS* held that analysis of the ‘portion of the market’ affected was required to apply the *per se* prohibition rule against price fixing.³¹² Subsequently, *per se* analysis cases like *NCAA v Board of Regents* muddied the waters.³¹³ Reviewing the facts, the Court confirmed the finding of a ‘separate market for telecasts of college football which ‘rest[s] on generic qualities differentiating’ viewers’ over which the *NCAA* enjoyed a monopoly. The passage was however preceded by a statement suggesting that the *NCAA* restrictions could attract liability ‘without proof of market power’, and ‘even in the absence of a detailed market analysis’. Later, in *FTC v. Ind. Fed’n of Dentists*, the Court more clearly held that since ‘definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition, ‘proof of actual detrimental effects, such as a reduction of output,’ can obviate the need for an inquiry into market power’.³¹⁴

The Supreme Court might have laid this discussion to rest in recent opinions. In *Amex*, the Court required a preliminary market definition in a case involving a vertical restraint, even though the evidence on the record pointed out clearly to adverse price effects.³¹⁵ And in *NCAA v Alston*, the Court did not challenge the identification, by the lower courts, of a relevant market in a case where the defendants had admittedly engaged in horizontal price fixing.³¹⁶

Bottom line? A market definition screen appears warranted in all or most cases. The amount of market definition work required, however, will depend on the type of restraint. If the challenged conduct falls within a category of behaviour which has been ruled to be one that knowingly threatens to raise prices and decrease output like price fixing, the market definition work will be limited.³¹⁷ When this is not the case, the amount of market definition work will be higher.

The rule that require a market definition in most cases is sensible. True, a straight focus on price or output might save a lot of time. But what price, or what output, is it relevant to focus on? Do the prices or output observed cover a significant proportion of buyers? And if price and output are relevant, how fixed in time are they? A handle on the relevant market provides answers. Direct observations of price or output effects do not.

b. EU law

EU law benefited from cross fertilization. Compared to US law, EU law developed more quickly a market definition practice. The first cases adopted under Article 101 and 102 TFEU were built upon explicit consideration of relevant markets.

³¹¹ As the Court noted in *California Dental Assn. v FTC* 526 U.S. 756 (1999), ‘categories of analysis of anticompetitive effect are less fixed than terms like ‘*per se*,’ ‘quick look,’ and ‘rule of reason’ tend to make them appear’(779). In intermediate analytical categories, one can find a range of practices that will require some analysis, but not a full blown market investigation. This is the case when ‘likelihood’ of ‘anticompetitive effects is obvious’ (Phil Areeda talked of the ‘twinkling of an eye’, see Phillip Areeda, ‘The ‘Rule of Reason’ in Antitrust Analysis: General Issues’ (1981) 81 Federal Judicial Center 1) or where a ‘confident conclusion about the principal tendency’ of the anticompetitive effects of the restraint can be reached.

³¹² We are well aware that *BMI* is a rule of reason case, but the *dictum* we discuss concerns the *per se* rule.

³¹³ *NCAA v Board of Regents* n(183).

³¹⁴ *FTC v. Ind. Fed’n of Dentists* [1986] 476 U.S. 447, 460.

³¹⁵ *Amex* (n 176).

³¹⁶ See n 258.

³¹⁷ Of course, if a possibility is reserved to salvage the conduct from *per se* illegality by application of a de minimis rule, then the market definition work increases.

A more important difference, however, is that EU law assigns a critical role to market definition in single firm conduct cases, and a lesser one in coordinated conduct cases. The Courts require a market definition in Article 102 TFEU cases. In *United Brands*, the Court said that market definition is ‘necessary’ to determine a dominant position.³¹⁸ Other abuse of dominance cases kept stressing that the definition of the market is of ‘essential significance’³¹⁹ or ‘fundamental significance’.³²⁰ The Court’s insistence on the market definition is logical. The wording of Article 102 TFEU requires a proof of a base of market power for its application. And the term ‘position’ hints at a structural proxy. Market definition helps to the extent that it gives a market share number.

As far as Article 101 TFEU is concerned, the production of a market definition as grounding for a finding of liability appears unnecessary. In *Volkswagen*, the Court held that the definition of the relevant market differs ‘according to whether Article [101] or Article [102] of the Treaty is to be applied’, and said it is only ‘necessary precondition’ for the application of Article 102 TFEU.³²¹

Now, as is often the case in EU competition law, the clear rule in the case-law is belied by judicial and administrative practice. The reality is this: market definition is key in Article 101 TFEU cases. Antitrust legislation as well as soft law documents allows parties to agreements the benefit of individual or categorical exceptions conditional on the respect of market share limits.³²² In *Delimitis*, a case involving a dispute between a brewery and a tenant over a comprehensive beer supply agreement, the Court held that in any competitive evaluation of effects ‘the relevant market must first be determined’.³²³ Later, in *Langnese Iglo*, a case over similar arrangements in the ice cream industry, the Court held that the delimitation of the relevant market is ‘essential in order to analyse the effects of the exclusive agreements on competition’.³²⁴

The market definition exemption of *Volkswagen* might therefore apply only to a subset of naked, or ‘by object’, restrictions. Yet even in such cases, a definition of the relevant market will be useful for agencies and courts in the estimation of antitrust fines or damages.

One important nuance matters still. The EU Courts ascribe greater consequences to errors in market definition under Article 102 TFEU, compared to Article 101 TFEU. In *Langnese Iglo*, the Court faulted the Commission for not including scooping ice cream sold in the street in its definition of a market for impulse ice cream. But the Court reviewed other facts, and found on that additional examination that the market definition error would have produced marginal consequences on the Commission’s evaluation of anticompetitive effects. By contrast, in Article

³¹⁸ *United Brands* (n 167).

³¹⁹ *Continental Can* (n 134), para 32.

³²⁰ Case 31/80 *Loreal v De Nieuwe AMCK* [1980] Rec 1980/3775, para 25.

³²¹ See n 165, para 230.

³²² These are the de minimis rules. See Communication from the Commission — Notice on agreements of minor importance which do not appreciably restrict competition under Article 101(1) of the Treaty on the Functioning of the European Union (De Minimis Notice) 2014; Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices (Text with EEA relevance) 2010 (OJ L); Communication from the Commission — Notice — Guidelines on the application of Article 81(3) of the Treaty (n 222).

³²³ See n 194, para 16.

³²⁴ Case T-7/93 *Langnese Iglo GmbH v Commission of the European Communities* [1995] II-01533/1539, para 60.

102 TFEU, market definition errors will be presumed to invalidate findings related to dominance, without further need to analyse the facts. In the first CEAHR case, the General Court refused to follow the Commission's holding that luxury and prestige watches, spare parts, and repairs and maintenance services formed a single market. The case was discarded. The Commission adopted a new decision, this time distinguishing between three separate markets.³²⁵

Servier shows even more neatly how market definitions errors can collapse a liability finding like a house of card. Here, the Commission had found that a pharmaceutical firm manufacturer had unlawfully breached Article 102 TFEU by entering into pay for delay practices to protect its dominant position over Perindopril.³²⁶ The Commission had excluded from the relevant market a class of heterogeneous medical products known as ACE inhibitors. The General Court faulted the Commission's conclusion on the ground of survey evidence and internal documents that showed clear patterns of substitution with prescribers.³²⁷ It annulled the finding of abuse.

The general takeaway is this. Under Article 102 TFEU, market definition is the analytical foundation on which everything rests.

c. Conclusions

When antitrust experts disagree, it is often about market definition. A vigorous controversy concerns the right degree of aggregation of products, services or user groups into a relevant market. To see the issue clearly, consider the following example. Assume three products A, B, and C exist. The products are not substitutable. A firm supplies A, B, and C. Is it in a 'single' market for a cluster of products A+B+C? Or is it in 'separate' markets A, and B, and C? Now assume that A, B, and C are respectively right shoe, left shoe, and laces. Clearly, the single market appears to be the correct answer. But consider now that A, B, and C are respectively printers, ink cartridges, and repair services. The single market conclusion is less obvious. What rule of method should allow the selection of a single or a separate market? Both US and EU law have struggled to bring a coherent response to this issue. Often, agencies and courts look at average and historical diversification trends in the industry.³²⁸ If most firms are multi product ones, then the analysis will lean towards a single market.³²⁹ If not, that is some firms are diversified and others are not, then the analysis will follow separate markets.³³⁰ But this logic does not hold in all cases. In *Hoffmann La Roche*, the Court followed a separate

³²⁵ See *CEAHR v European Commission*, (n 291).

³²⁶ Case AT.39612 *Perindopril (Servier)* [2014] Notified under document C(2014) 4955.

³²⁷ Case T-691/14 *Servier SAS and Others v European Commission* [2018] ECLI:EU:T:2018:922, para 1480.

³²⁸ For instance, in *Michelin I*, the Court looked at a single market for replacement tyres for lorries, buses and similar vehicles, confirming the industry level tendency. See n 164.

³²⁹ See, for example, *Grinnell* n(147). Here, a group of related companies involved in protection and security solutions had acquired 87% of the national central station service business. The Court held that 87% looked clearly like monopoly but added with a doubt, 'if that business is the relevant market'. It proceeded to ask, '[t]he only remaining question therefore is, what, is the relevant market?'. In turn, the Court said the answer to the question requires analysis of 'commodities reasonably interchangeable'. With this background, the Court controversially refused to consider each protection and security service one by one: burglar protection, fire protection, etc. Instead, it found that the right approach consisted in considering that firms competed with a 'cluster' of security services, and that the defendant was dominant.

³³⁰ See the first CEAHR judgment where the General Court noted that the existence of independent repairer that were not manufacturing luxury and prestige watches was key to annul the EC's decision to treat the markets for luxury watches and luxury watches' aftersales services as a single one. See n 291.

market analysis, in spite of the industry being composed of multi product firms.³³¹ In *AKZO*, the industry configuration looked similar, but the Court took another tack.³³² Sometimes, the logic followed has nothing to do with facts.³³³ In *Hilti*, the Court supported an idea of separate markets for nail guns, cartridge strips (and cartridges) and nails even if most suppliers sold all three components as 'systems'. The Court said that going for a single market would prevent applying the law on tying,³³⁴ and suggested this would be a problem.

Market definition also receives severe criticism on the ground that it downplays competition.³³⁵ With an analytical focus on short term substitutability, market definition would by design neglect the competitive pressure arising from supply side elasticity, or from potential competitors. Moreover, market concern would be gameable. Because market definition is determinant in liability outcomes, Mr Justice Fortas warned in his *Grinnell* dissent of risks that agencies and plaintiff promote 'procrustean' definitions that 'gerrymander' the boundaries of a relevant market around a firm's product.³³⁶ In contrast, defendants pretend that they compete against a large population of firms which often will comprise either suppliers of complements, differentiated, or bundled products.

Last, market definition has also stressed the costs of application of market definition in environments where firms intermediate the interdependent demand of distinct user groups and/or where suppliers charge no monetary price for their goods. These issues are especially salient in digital markets.

It is a pity that market definition fuels division in antitrust law. As judge Posner rightly observed, monopoly power is a 'question of fact'.³³⁷ Facts being imperfect, people will inevitably disagree over them. In principle, a focus on method, if reasonable, should enable consensus.³³⁸ The preliminary delimitation of the relevant market arguably provides just this.³³⁹ It sets fact finding on neutral grounds, promotes cooperation with defendants, and maintains the costs of market power evaluation within reasonable bounds. It is likely that antitrust disagreements about market definitions owe more to priors about the solution of particular cases, than over the analytical method itself.

331 *Hoffmann La Roche* (n 265).

332 *AKZO* (n 271).

333 Note here that the Court has said in *Servier* that 'the definition of the boundaries of the market must be made by examining empirical evidence, aimed at making an effective use of all information which is relevant in an individual case'. See n 326, para 1383.

334 Case T-30/89 *Hilti AG v Commission of the European Communities* [1991] II-01439/1441.

335 In the past, market definition was said to exonerate too much monopoly power. Critics liked to point out to the Supreme Court decision in *du Pont*. See n 252.

336 See Justice Fortas dissent in *Grinnell* (n 150).

337 *Olympia* (n 155).

338 In *du Pont*, the Court held that 'Section 2 requires the application of a reasonable approach in determining the existence of monopoly power just as surely as did § 1'. See n 252.

339 Justice Fortas described it in his dissent in *Grinnell* as 'an economic task put to the uses of the law'. Justice Fortas however also pointed out to risks of distortion, unless it is 'well done'. See n 150.

B. Market Power Evidence

In US and EU law, two types of evidence can be used to establish market power facts. Courts accept direct or indirect evidence. Direct evidence focuses on exercise of *power* to infer its existence. The relevant data points are higher prices, lower output, or reduced quality. Indirect evidence focuses on market power *circumstances* (also called circumstantial evidence) to infer its existence. The relevant data points are dominant market shares (or a foreclosure share leading to dominance), entry barriers, the regulatory environment, etc.

Both ideas of exercise and circumstances of market power match conceptually well with the proxies of power and structure described above. But they are not identical. Proxies of power and structure are intellectual constructs. They are not legal principles like the rules of evidence. Besides, direct evidence of market power focuses on a class of issues narrower than the abovementioned concept of power. For example, coercive acts like threats to withhold supply to buyers will rarely be deemed direct evidence of market power. By contrast, circumstantial evidence embodies more than structural indicators. For example, exclusionary practices of a firm with low market share might be deemed unlawful upon diagnosis of an incipient trend toward concentration.

This sub-section addresses the following question: do US and EU antitrust law prefer one type of evidence over the other to establish market power facts? We focus on facts of market power base and injury, and leave aside market power utilization whose proof can often be observed directly.³⁴⁰

1. US law

In US law, direct and circumstantial evidence can be used to establish market power facts. The choice of one evidential route over the other depends on what market power fact the agency or plaintiff wants to prove. That said, a general rule of practice is the following. Indirect evidence often supports proof of a *base* of market power fact. Direct evidence is often relied upon to show a fact of market power *injury*. In other words, US antitrust practice tends to treat direct evidence as inferentially stronger in a dynamic context (has price increased?), than in a static context (are prices high?).³⁴¹

One qualifying addition is in order. Direct evidence only dominates indirect evidence to prove a fact of *actual* market power injury. In *Indiana Fed of Dentists*, the Court said that adverse output effects ‘obviate the need for an inquiry into market power’ – meaning structure – ‘which is a surrogate for detrimental effects’.³⁴² But indirect evidence will remain easier to adduce in cases where a fact of *likely* market power injury constitutes the allegation.

³⁴⁰ Note that sometimes, direct evidence or absence thereof, is used to establish market power utilization. For example, in *Matsushita*, the Court rejected a notion that there have been a conspiracy on grounds of direct market power evidence. Put differently, direct evidence of absence of monopoly power disproves the act of conspiracy. The Court stated: ‘The alleged conspiracy’s failure to achieve its ends in the two decades of its asserted operation is strong evidence that the conspiracy does not in fact exist’. See n 231, 592.

³⁴¹ A long line of cases looks at whether defendants possess market power by considering on market share evidence. See, for instance, *Lorain Journal* (n 204): ‘The court below describes the position of the Journal, since 1933, as ‘a commanding and an overpowering one. It has a daily circulation in Lorain of over 13,000 copies and it reaches ninety-nine per cent of the families in the city’ (347 U.S. 149).

³⁴² *FTC v Indiana Fed’n of Dentists* (n 176), 461.

Moreover, direct evidence is not a smoking gun.³⁴³ The case law of the Supreme Court shows that cases brought on the basis of direct evidence are fragile. In *du Pont*, the Court refused to consider high profits as evidence of market power absent a benchmark for comparison.³⁴⁴ In *Brooke Group* and *Amex*, the Court noted that confounding factors such as output expansion discarded the inferential value of evidence of rising prices.³⁴⁵ This is not to mean that direct evidence never proves antitrust injury. In *Conwood*, evidence that industry output had been higher before the challenged conduct allowed the Court to establish a violation of the Sherman Act.³⁴⁶

Against this background, one can question whether direct evidence constitutes the preferential route for an antitrust plaintiff or agency. Cases advanced on ground of likely effects might not be harder. Recall that in *Microsoft*, the Court did not require a very large foreclosure share to establish Section 2 liability.³⁴⁷ It also refused to impose a strict counterfactual demonstration that *Microsoft* conduct was the main cause of foreclosure of competitors.

Last, a possible exception to the preference for direct evidence concerns market definition. The Supreme Court has accepted both direct (in *du Pont*) and indirect (in *Grinnell*) evidence of product interchangeability.³⁴⁸ The reason for the lower reliance on direct evidence owes to the cellophane fallacy. When a 5 to 10% price increase is applied on top of a monopoly price – a test known as the SSNIP test – unreal patterns of substitution emerge. For example, a consumer of monopolized TV entertainment subject to a price increase in excess of its reservation value might choose to redirect purchases towards books, online language courses, or knitting material.³⁴⁹ Yet, it is a stretch to consider that all these products compete in the same market as TV entertainment channels.

343 Contrary to a widespread presentation (that is not based on Supreme Court doctrine) that holds that direct evidence cannot be rebutted simply by the production of indirect evidence. See Andrew I Gavil, 'Burden of Proof in U.S. Antitrust Law' (2008) 1 *Issues in Competition Law and Policy* 125.

344 See *Du Pont* (n 252), where the Court affirmed: 'Nor can we say that *du Pont*'s profits, while liberal (according to the Government 15.9% net after taxes on the 1937-1947 average), demonstrate the existence of a monopoly without proof of lack of comparable profits'. And: 'There is no showing that *du Pont*'s rate of return was greater or less than that of other -producers of flexible packaging materials' (351 U.S. 404).

345 See *Brooke Group* (n 200). The Court held that: 'Even in a concentrated market, the occurrence of a price increase does not in itself permit a rational inference of conscious parallelism or supracompetitive pricing. Where, as here, output is expanding at the same time prices are increasing, rising prices are equally consistent with growing product demand. Under these conditions, a jury may not infer competitive injury from price and output data absent some evidence that tends to prove that output was restricted or prices were above a competitive level'. 509 U.S. 237. See also *Amex* (n 176).

346 Thus controlling for what Harold Demsetz called the Nirvana Fallacy, see Harold Demsetz, 'Information and Efficiency: Another Viewpoint' (1969) 12 *The Journal of Law & Economics* 1. In *Conwood*, the defendant was saying that there was no injury to competition because the number of moist snuff products had increased, and the market had expanded, compared to other tobaccos products that had decreased. The court however found that *Conwood*'s growth post defendant conduct had been lower (2.5%), than pre conduct (11%) in the 10 years prior to 1990. See n 117.

347 See *United States v Microsoft Corp.* 584 U.S. ____ (2018). Note there another inconsistency in a discrepancy between Section 1 and 2. The case law do require different levels of market share foreclosure under Section 1 and 2 when the indirect evidence route is followed. But it does not discriminate equally between both provisions under the direct evidence route.

348 In *Grinnell*, the Court noted that watchman services or local services did not compete with central station ones, on the ground that they were less reliable, and gave rise to less premium discount from insurers. See n 150.

349 Lawrence White and Philip B. Nelson, 'Market Definition and the Identification of Market Power in Monopolization Cases' (2003) NYU Working Paper No EC-03-26.

2. EU law

EU law prefers indirect evidence to prove many market power facts. This is true for facts of market power *base*. Since *Hoffmann La Roche*, ‘very large market shares’ must be presumed to establish of a dominant position.³⁵⁰ In *AKZO*, the Court held that a market share of 50% qualified as ‘very large’.³⁵¹ *AKZO* marked an evolution. In *Hoffmann La Roche*, the Court had refused application of the presumption to a share approaching 51%,³⁵² and reserved it to markets in which the defendant held shares of between 75 and 88%.³⁵³ The result of these generous rules has been to create a bias in practice towards mobilizing indirect evidence in establishing a market power base. When high market shares are not identifiable, EU law again defaults to indirect, not direct evidence. A ‘derivation’ method must be followed.³⁵⁴ Dominance can be evaluated on the basis of a ‘combination of several factors which, taken separately, are not necessarily determinative’.³⁵⁵

No statement of the Court appears to permit a showing of a market power base by adducing direct evidence. Occasionally, direct evidence has been used to corroborate a showing of market power based on indirect evidence.³⁵⁶ In *Hoffmann La Roche*, the Court opened a narrow possibility for a defendant to invalidate indirect evidence of a market power position by presenting direct evidence. The Court held that ‘the fact that an undertaking is compelled by the pressure of its competitors’ price reductions to lower its own prices is in general incompatible with that independent conduct which is the hallmark of a dominant position’.³⁵⁷ However, the Court denied the necessity of engaging in a full review of the facts to determine whether price reductions were a sign of competitive pressure, and held that this would be in any case ‘inconsistent with the existence of a dominant position’.

As far as facts of market power injury are concerned, the situation is mixed. The case law has long been rife with statements whereby ‘concrete’ effects were not required. A showing of a ‘likely’ market power injury sufficed for Article 101 or 102 TFEU liability. The case-law concept of likely effects also covered injury that might have happened in the past. With this understanding, indirect evidence became the preferred proof of likely effects, including in cases where actual effects could have been established. More recently, however, the Court has straightened its case law on market power injury. The judgments in *Post Danmark I* and, more important, *Intel 1* and *2*, show that direct and indirect evidence can both establish proof of market power injury. In *Post Danmark I*, the Court has recommended usage of direct price-costs tests.³⁵⁸ *Intel 1* and *2* suggest to focus on indirect evidence of foreclosure, but recognize

³⁵⁰ *Hoffmann La Roche* (n 265), para 41.

³⁵¹ *AKZO* (n 271), para 60.

³⁵² See n 265, para 58.

³⁵³ *ibid.*, para 56.

³⁵⁴ See n 167, para 66.

³⁵⁵ *ibid.*

³⁵⁶ See the General Court in *British Airways* (n 269), para 218: with eye son a monopsony power configuration, the Court observed that British Airways was in a position to ‘impose a reduction as from 1 January 1998 of its rates of commission in force up’ (emphasis added).

³⁵⁷ *Hoffmann La Roche* (n 265), para 71.

³⁵⁸ See n 220.

some potential application to the price cost test of the Guidance Paper on Article 102 TFEU.³⁵⁹ In the Article 101 TFEU case law, things are even clearer. In *MasterCard*, the Court said that what matters is to establish ‘that a measure is liable to have an appreciable adverse impact on the parameters of competition, such as the price, the quantity and quality of the goods or services’.³⁶⁰

In market definition, indirect evidence is preferred to direct evidence. In *Topps*, the General Court held that a ‘Small but Significant Non-transitory Increase in Prices (SSNIP)’ test is ‘not the only method’.³⁶¹ On appeal, the Court further noted ‘the absence of an obligation to carry out a ‘SSNIP test which consists in a mental exercise presupposing a small (5 to 10%) but permanent variation’.³⁶² With this, multiple factors bearing on product substitutability are to be considered. Antitrust lawyers like to illustrate the method that is applied with reference to *United Brands*. The case featured a dispute between *United Brands* and the Commission over whether the product market comprised all fresh fruits or whether there was a ‘specific demand for bananas’. In a famous passage, the Court held that ‘[t]he banana has certain characteristics, appearance, taste, softness, seedlessness, easy handling, a constant level of production which enable it to satisfy the constant needs of an important section of the population consisting of the very young, the old and the sick’.³⁶³

Today, it is clear that a quantitative test is not required. In many recent cases involving digital industries, the Court and agencies have found the good old qualitative method helpful. For indeed, a qualitative assessment appears less costly than application of a SSNIPP test in zero price markets and/or multisided context.

VII. CONCLUSION

Modern US and EU laws are more anti-market power laws than antitrust ones. Despite a common focus, important differences exist between US and EU antitrust laws. US antitrust law uses a decidedly economic conception of market power. EU antitrust law has developed a more idiosyncratic understanding of market power.

Besides, US antitrust law grew into an explicit system of market power control, while EU competition law can be better characterized as a system of market share control. The legal implication of the different transatlantic focus on market power proper versus market power share are ambiguous. Economics suggests that market shares are uninformative of market power. There are many reasons why a firm might hold a dominant share without market power, including superior efficiency, technological innovation, or temporary shocks in the economy. Moreover, market shares do not tell how perceived market power translates into price effects and output. In view of the economic consensus, market shares appear to be a poor indicator of market power. Nevertheless, a focus of market shares offers one advantage. It reduces enforcement costs. The loss in diagnosis accuracy from a focus on market share might be

³⁵⁹See n 234, para 129.

³⁶⁰ Case C-382/12 P *MasterCard Inc. and Others v European Commission* [2014] ECLI:EU:C:2014:2201, para 180.

³⁶¹ Case T-699/14 *Topps Europe Ltd v European Commission* [2017] ECLI:EU:T:2017:2, para 82.

³⁶² *ibid.*, para 78.

³⁶³ See n 167, para 31.

compensated by gains of observability, and in turn lower enforcement costs that are particularly suited in regimes with higher risk aversion and uncertainty (like perhaps the EU).³⁶⁴

³⁶⁴ Nicolas Petit, 'A Theory of Antitrust Limits' (2021) 28 *Geo Mason L Rev* 1399.

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