

SOME ECONOMICS OF ABUSE OF DOMINANCE

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1. Introduction

European competition law and policy towards mergers and anti-competitive agreements have become much more soundly based in economic principles over the past decade. The law on abuse of dominance has not. The question now is whether, and if so how, the Commission will forge a more economics-based policy approach in this core area of competition law. The recent landmark *Microsoft* judgment certainly does not compel it to do so, but neither does it preclude it. Indeed the judgment emphasises that under EC law, the Court's "review of complex economic appraisals made by the Commission is necessarily limited to checking whether the relevant rules on procedure and on stating reasons have been complied with, whether the facts have been accurately stated and whether there has been any manifest error of assessment or a misuse of powers".² So there is much to play for.

The aim of this paper is to appraise from an economic perspective selected aspects of current law and policy on Article 82 (see box) concerning exclusionary abuse of dominance. The topic of exploitative abuse, important though it is, lies beyond its scope. Ideally, especially at a conference celebrating fifty years of the Treaty, the paper would trace the evolution of lines of case law on Article 82 (formerly 86) but here too I will be selective, and focus on three cases on which judgment has been given this year. Since, quite unlike the US, the evolution of EC law on abuse of dominance has been rather limited, history will not be lost from view.

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² *Microsoft v Commission*, T-201/04 [2007] at paragraph 87, with the point repeated at paragraphs 379 and 482.

Article 82 of the EC Treaty

Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

- (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
- (b) limiting production, markets or technical development to the prejudice of consumers;
- (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

Two of the exclusionary abuses to be discussed involve pricing. Section 4 below looks at predatory pricing from the perspective of the *Wanadoo* case.³ Section 5 concerns discounts and rebates, which were at issue in *British Airways*.⁴ The *Microsoft* case concerned the ‘non-price’ abuses of refusal to supply and tying and bundling, which are considered in section 6. As will be seen, ‘non-price’ abuses often involve prices especially when it comes to remedies. The discussion of these abuses is preceded, in Section 3, by a quick tour of the economics of anti-competitive exclusion. However, since there is no abuse without market dominance, a word on that is due first.

³ *France Télécom SA v Commission*, T-340/03 [2007].

⁴ *British Airways v Commission*, C-95/04 P [2007].

2. Dominance

Much could be said about dominance but I will limit myself to two points.⁵ The first is the relationship between dominance and abuse, on which the Report by the Economic Advisory Group on Competition Policy (EAGCP, 2005, page 13) said: “If an effects-based approach provides evidence of an abuse which is only possible if the firm has a position of dominance, then no further separate demonstration of dominance should be needed”. On this view, separate verification of dominance needs less attention with an effects-based approach to abuse than if abuse is appraised formalistically.

However, serious prior dominance assessment is essential and natural in an approach to abuse oriented to economic effects. Abuse analysis is hard and error-prone on any approach, and dominance assessment has the great merit of efficiently screening out cases where it need not be undertaken (and correspondingly deterring the bringing of cases in which market power is less than strong). Likewise dominance analysis is a healthy discipline. Unilateral conduct can easily look suspicious, especially to the economically untrained eye, but cannot reasonably be considered sinister without independent evidence of substantial market power. This is not to say that the conduct at issue should be excluded from the assessment of dominance. And the analysis of abuse, if the dominance threshold is crossed, should be carried out in a way that integrates the findings of the market power analysis.

Allegations of predatory pricing illustrate the point. Firms price below incremental cost for all sorts of reasons, mostly benign, especially for consumers. Without independent evidence of market power there is no good reason for competition policy scrutiny of such pricing. When the evidence shows such power amounting to dominance, however, further scrutiny makes sense. To make a finding of predatory pricing abuse, should it be necessary in Europe, as in the US, to show not only below-cost pricing but also a dangerous probability of recoupment? Apparently not in EC law, and arguably not in terms of economics provided dominance has been proven to a proper standard and the exclusion is from the dominated market. But even then it would seem unwise for say an agency not to ask itself the recoupment question at least as a cross-check on its dominance finding. This issue will be taken further in section 4 below.

⁵ Fuller discussion is in Vickers (2006).

The second point concerns the standard of proof of dominance. In the period from 1990 to 2004 when the concept of “dominance” did double duty because of its primary role in the Merger Regulation as well as in Article 82, there was some merit in the concept being treated with a degree of elasticity. Greater strictness is now called for, and will become all the more important if scope for private actions is to expand. The basic reason is that given conduct by a firm with a mild degree of market power is far less likely to distort competition than the same conduct by one with great market power. So, on the whole, public authorities spend their resources better examining the latter than the former. Private actions are fine so long as their prospects of success are good when, and only when, the public interest tends to be promoted rather than retarded by them. So a disciplined approach to dominance is important for the direction of private as well as public enforcement of Article 82.

Despite its many merits, the Staff Discussion Paper (DG Competition, 2005) therefore caused some consternation when at paragraph 31, after commenting on high market shares as an indicator of dominance, it spoke of dominance being “more likely to be found in the market share range of 40% to 50% than below 40%, although also undertakings with market shares below 40% could be considered to be in a dominant position”. The rider that firms “with market shares of no more than 25% are not likely to enjoy a (single) dominant position” hardly gave comfort.

Shares of properly-defined markets are at most a way to screen out cases that deserve no more attention. High shares alone never imply dominance. Unless market definition has gone awry – in which case that is the problem to fix – there is no significant prospect of single-firm dominance with a share anywhere near 25%, and dominance at 40% would normally seem quite improbable. In my view, therefore, it would be preferable for the Commission to say that dominance is more likely to be found above 50% than below, and not likely to be found below 40%. Subject to the ever-present vagaries of market definition, this would indicate something of a safe harbour, as far as concerns unilateral conduct, for firms that might otherwise soften their competitive edge to the detriment of consumers for fear of competition law entanglement.

In sum, dominance analysis should precede abuse analysis and be undertaken in a disciplined way. In cases that proceed to abuse analysis, dominance assessment should however be integral to, not separate from, the analysis of harm to competition and consumers.

3. Some economics of anti-competitive exclusion

We now turn from dominance to abuse, with a focus on exclusionary abuse. The fundamental question for law and policy to address in the area is how to draw the line between unilateral conduct that is ‘competition on the merits’ or ‘normal competition’, and on the other hand anti-competitive (i.e. competition-distorting) conduct. Only the latter should be condemned as unlawful. However, an immediate problem is that rivals to the dominant firm may be excluded from the market, or at least from serving portions of market demand, by competition on the merits (if the dominant firm is sufficiently superior at delivering what customers want) as well as by anti-competitive conduct. In a sense, then, the task is to distinguish between good and bad exclusion. This is surprisingly hard to do even in principle. It is harder still to craft administrable legal rules and precedents that are good at separating anti-competitive conduct from competition on the merits.

What does economics have to say about the fundamental question? Modern economic theory of anti-competitive behaviour is ‘post-Chicago’ in that it is underpinned by game theory and contract theory, not just price theory, and its conclusions are often at odds with the *per se legality* that some Chicago scholars advocated for a range of unilateral (and vertical contractual) practices. But ‘post-Chicago’ does not mean anti-Chicago; to the contrary it has absorbed much of the Chicago critique of 1950s and 1960s interventionism in US antitrust law and policy. Indeed much ‘post-Chicago’ economics starts by taking seriously, and answering, the challenge posed by Chicago scholars of explaining why, since there is ultimately only one monopoly profit to be had in any market, a dominant firm would find it profitable to engage in efficiency-reducing behaviour such as the exclusion from related markets of rivals more efficient than itself.

The aim of this section is to give a brief guided tour of some economic theory relevant to the assessment of exclusionary abuse under five headings:⁶

- predatory pricing
- partial exclusion to exploit rivals
- divide-and-rule exclusion
- leverage of market power
- maintenance of market power.

Needless to say, the subject of anti-competitive exclusion receives much more thorough treatment in books such as Motta (2004) and Whinston (2006), and in recent surveys, notably Kaplow and Shapiro (2007), and Rey and Tirole (2007).

3.1 Predatory pricing

Predatory pricing, in its simplest form, is below-cost pricing by a dominant firm to drive rivals from the market and thereby create monopoly power for the dominant firm to enjoy. In that stark form predatory pricing satisfies three principles, or tests, that have been advanced to distinguish anti-competitive conduct from competition on the merits – the sacrifice test, the as-efficient competitor test, and the consumer harm test.⁷

First, pricing below cost normally entails profit sacrifice by the dominant firm if by ‘cost’ is meant the avoidable cost of serving the demand at issue. Put differently, such pricing normally makes no business sense but for its anti-competitive effect. The caveat ‘normally’ is however important. There are settings where pricing below avoidable cost could be profitable for dynamic reasons other than causing competitors to withdraw from the market (or portions thereof). Examples include cost dynamics such as learning-by-doing and inter-temporal demand linkages such as profitable after-market sales.

Second, pricing below avoidable cost tends to exclude as-efficient competitors from serving the demand in question. If the incumbent sets price below the cost of meeting that demand,

⁶ These headings (and one on foreclosure via vertical integration) formed the structure of the Cleary Gottlieb lecture that I gave in London in September 2006 and the Telecom Italia lecture in Milan in November 2006. Slides are available on request.

⁷ Vickers (2005) discusses these principles in more detail. They are by no means the only ones that have been suggested.

then even if the rival is slightly more efficient than the incumbent, it will not be able profitably to serve the demand (perhaps unless it has dynamic cost or demand reasons of the sort mentioned in the previous paragraph).

Third, although below-cost pricing benefits consumers in the short-run, if the result is substantially greater monopoly power than would otherwise have existed, then the incumbent will recoup the losses from below-cost pricing by high prices to the overall detriment of consumers. Then there will be net consumer harm.

A tradition of economic thought often associated with the Chicago School regards allegations of predatory pricing with doubt bordering on incredulity, and cautions against policy intervention to stop low pricing also because it risks and promoting inefficient competitors and harming consumer interests. Why would a firm, especially one with market power, throw away money by below-cost pricing? If the threat to do so lacks credibility, as in the simplest of economic models, why would it deter a rival from entering or expanding in the market? The answer is that the simplest of economic models assume away issues of asymmetric information and uncertainty. Once these are re-injected, realistically, into the analysis, there is ample scope for rational – and hence credible threats of – below-cost pricing.⁸

For example, aggressive pricing to build or sustain a reputation for toughness may be quite rational and hence credible. Short-term loss-making in one market might then be recouped by deterring entry in other markets in which the incumbent operates. Likewise low pricing may be a credible signal of market conditions that deters entry. It could be used to play havoc with an entrant trying to test out market conditions, or with the principal/agent relationship between the entrant and its finance providers.⁹ For all these reasons it seems right to approach allegations of predatory pricing with caution not incredulity. Exactly that approach was recommended by the US Court of Appeals in the 2003 *American Airlines* case (*US v AMR Corp*), which observed that “Post-Chicago economists have theorized that price predation is not only plausible, but profitable, especially in a multi-market context where

⁸ For a full analysis and critique of the stance of US antitrust law towards allegations of predatory pricing since 1993, see Bolton, Brodley and Riordan (2000).

⁹ A point explored by Bolton and Scharfstein (1990).

predation can occur in one market and recoupment can occur rapidly in other markets". This point bears on the question, to be considered further in section 4, of whether proof of likely recoupment should be required before a finding of predatory abuse is made.

Predatory pricing can be defined more broadly than in relation to below-cost pricing. An alternative approach would be to say that low pricing *intended* to eliminate rivals is predatory. But besides the practical difficulties of discerning intent, this faces the fundamental problem that all sorts of irreproachable business behaviour, including competition indisputably 'on the merits', may have eliminatory intent. Justice Breyer, when a Court of Appeals Judge, once drew the parallel with a boxer delivering a perfectly legal punch with eliminatory intent, who is not thereby guilty of attempted murder.¹⁰

Another view would say that low pricing could well entail profit sacrifice, or be conduct that makes no business sense but for anti-competitive effects, without price going below avoidable cost. The latter is sacrifice relative to zero profit, whereas a firm with market power can usually do a lot better than that. Moreover, pricing above avoidable cost, so long as not too much above, could cause the withdrawal of a rival that, though less efficient than the incumbent, would bring competition to the incumbent that would be beneficial for consumers.

True, but how to craft a legal rule on those lines? Even in principle, the issue is unclear since both the sacrifice test and the consumer harm test raise the question: relative to what? For example, it would seem absurd in principle, never mind practice, to require a dominant firm to maximise profit subject to rivals not altering the scale of their operations. And it would seem odd to ban a dominant firm from causing the exit (or shrinkage) of rivals whose presence (or non-shrinkage) would benefit consumers. On that basis why not go the whole hog and require the firm to maximize consumer surplus?

Therefore having below-cost pricing a necessary condition for a finding of unlawful predatory pricing, though unlikely to be the 'optimal' rule in every situation, has a good deal of common sense. Following the very influential paper by Areeda and Turner (1975), below-

¹⁰ Quoted by Kovacic (2007, page 49).

cost pricing became a necessary – but far from sufficient – condition for a predatory pricing violation in US law, and cost benchmarks feature prominently in EC law. As will be illustrated in section 4, there remains plenty of scope for argument over (a) the relevant cost concept (Areeda and Turner favoured average variable cost, as a proxy for marginal cost), (b) how to measure cost, (c) the role, if any, for evidence on intent, (d) whether or not separate proof of recoupment should be required, and (e) what scope should be allowed for justifications of below-cost pricing..

3.2 *Partial exclusion to exploit rivals*¹¹

Let us turn now to exclusive contracts – i.e. contracts under which customers (which themselves might be downstream firms selling to final consumers) agree not to deal with rivals to the dominant incumbent. At first blush these might seem ‘obviously’ anti-competitive since they restrict the buyers’ freedom of choice. But if a buyer freely and rationally entered into the exclusive contract, it would have been compensated for restricting its choice.¹² How then could it be in the interest of the incumbent to offer terms to the buyer attractive enough to persuade the buyer to restrict its freedom to buy instead from the rival, even though the rival might turn out to be more efficient than the incumbent?

Aghion and Bolton (1987) first gave the answer that, by appropriately structuring the exclusive contract, the incumbent-buyer pair might in effect sometimes be able to extract some of any efficiency advantage that the rival may have. In particular, by setting an appropriately calibrated *penalty* for breach of contract, payable by the buyer to the incumbent in the event that the buyer purchases from the rival, the rival, if it enters, will have to offer a sufficiently good deal for the buyer to pay the penalty for breach. If that happens, some of the rival’s efficiency advantage will be received by the incumbent-buyer pair. It is as if they set and collected an entry fee from the rival. When the rival is not sufficiently more efficient to pay the fee, the consequence will be the exclusion of a more efficient firm than the incumbent. But the aim here is not so much exclusionary as exploitative of the rival when it

¹¹ See further Rey and Tirole (2007, section 4.1).

¹² As this point indicates, the freedom argument cuts both ways. Policy intervention to ensure freedom *ex post* denies an element of freedom *ex ante* – namely freedom to agree not to exercise some options *ex post*. It therefore seems unlikely that freedom *per se* can be much help in distinguishing between pro- and anti-competitive behaviour.

is sufficiently more efficient to pay the fee; indeed that is when the incumbent does best. However, this argument does not work if, as in many legal systems, penalties for breach of contract are unenforceable, or if the exclusive contract is easily re-negotiable in the event of entry. Then the rival is never excluded if it is more efficient than the incumbent.

3.3 *Divide-and-rule exclusion*¹³

A second, and perhaps more important, reason why buyers might sign exclusive contracts even though that may foreclose a more efficient rival has to do with a possible co-ordination problem among buyers – hence ‘divide-and-rule’. If the entrant has scale economies or there are network effects in demand, then by pre-empting enough buyers with exclusive contracts, the incumbent might be able to deny the rival so much potential demand that the rival cannot operate efficiently (even though, at any given output level, the rival may be more efficient than the incumbent). As Aghion and Bolton (1987, section III) put it: “What is crucial ... is how the size of the entrant's potential market affects the probability of entry”. If shrinkage of that potential demand substantially reduces the probability of entry, then each buyer offered exclusivity by the incumbent might accept it for fear that otherwise it will be left in a rump of ‘free’ buyers that is too small for entry to be viable.

Divide-and-rule exclusion is explored theoretically and reinforced by Rasmusen et al (1991), and Segal and Whinston (2000), who show how the scope for exclusion may be greater if the dominant firm can discriminate among buyers, including sequentially. Of course theories of divide-and-rule exclusion are plausible in fact only if there are scale economies and, as a result of the dominant firm’s conduct, too few free buyers for rivals to achieve them.¹⁴

Sequential interactions with buyers are also a feature of Bernheim and Whinston’s (1998, section IV) analysis of exclusive dealing, in which exclusive dealing with the first set of buyers may lessen competition to supply subsequent buyers. Then, even if exclusive dealing is inefficient, it may come about because the first set of buyers can be compensated with part

¹³ See further Rey and Tirole (2007, section 4.2).

¹⁴ Fumagalli and Motta (2006) and Simpson and Wickelgren (2007) are two recent papers that extend the analysis, with mixed results, to the case where the multiple buyers are firms competing to sell to final consumers.

of the profit gain at the expense of the subsequent buyers. Again the theme is buyer disunity. Arguably, buyer disunity is at the heart of predatory pricing theory (discussed in section 3.1). If consumers *en masse* spurned the incumbent's predatory price and paid a premium to sustain the rival, they might well pay lower prices in the long run. But if each consumer has a negligible effect on the rival's survival prospects, none will want to pass up the good short-term offer from the incumbent.

3.4 Leverage of market power¹⁵

If a firm has a dominant position in the market for product A and bundles product B with product A, or ties them so that A can be bought only with B, it might seem superficially 'obvious' that the firm is leveraging or extending its market power from A to B. (For example, in section 6 below, the firm is Microsoft, A is its Windows operating system and B is its Media Player.) But the Chicago counter is again to ask why a profit-seeking firm with market power would engage in such behaviour unless it was efficient. Unless consumers wanted the products bundled or tied, their willingness to pay, and hence monopoly profit, would seem to be reduced by it.

The point was crisply put by Judge Easterbrook, formerly a leading exponent of the Chicago School, writing for the US Court of Appeals for the Seventh Circuit in the recent case of *Schor v Abbott Laboratories*, where the defendant was the supplier of a combination drug therapy for HIV.¹⁶ The central question in the case was whether there a 'free-standing' (e.g. independent from predatory) theory of monopoly leveraging that US antitrust law should recognise. It is worth quoting at length why Judge Easterbrook said not:

"The problem with 'monopoly leveraging' as an antitrust theory is that the practice cannot increase a monopolist's profits. [...] The basic point is that a firm that monopolizes some essential component of a treatment (or product or service) can extract the whole monopoly profit by charging a suitable price for the component alone. If the monopolist gets control of another component as well and tries to jack up the price of that item, the effect is the same as

¹⁵ See further Rey and Tirole (2007, sections 3.1 and 5.2) and Tirole (2005).

¹⁶ More specifically, plaintiff Schor contended that Abbot's price for its Norvir component was too high in relation to the price for its Kaletra combination containing Norvir, and that Abbott was thereby unlawfully leveraging its Norvir monopoly to other components. There was no contention of predatory pricing: the imputed price for the non-Norvir components of Kaletra was above AVC.

setting an excessive price for the monopolized component. The monopolist can take its profit just once; an effort to do more makes it worse off and is self-detering. [...] We appreciate the potential reply that it is impossible to say that a given practice ‘never’ could injure consumers. A creative economist could imagine unusual combinations of costs, elasticities, and barriers to entry that would cause injury in the rare situation. [...] But just as rules of *per se* illegality condemn practices that almost always injure consumers, so antitrust law applies rules of *per se* legality to practices that almost never injure consumers.”

This last point about rules being appropriate for conduct that meets an ‘almost-always’ test illustrates how considerations of administrability (often associated with Harvard Law School, notably Areeda, Turner and Breyer) can go hand-in-hand with Chicago School precepts – the ‘double helix’ of Kovacic (2007).

How has post-Chicago economics shown the coherence (albeit in Easterbrook’s view insufficient plausibility for policy purposes) of pure leveraging theory? Whinston (1990) showed how tying B with A might be able to deter entry into the B-market by making the A-monopolist a more aggressive competitor in the B-market. This theory requires A and B not to be closely complementary products, there must be credible commitment to tying (perhaps through technological integration), and the tying must be such as to leave too little independent B-demand in relation to the rival’s fixed costs for it to be viable. How common is the joint occurrence of these conditions is a matter for debate.

3.5 *Maintenance of market power*¹⁷

A distinct theory of exclusionary tying and bundling concerns not the leverage of market power from A to B, but rather the *maintenance* of market power in A – in other words the extension of market power in time, not from product to product. This theory of exclusion is entirely consistent with the Chicago point that there is only one monopoly profit; the issue is about its prolongation.

To see how the argument works, suppose that products A and B are demanded only in combination, that the incumbent has an A-monopoly for the time being, but that a potential A-rival is contemplating entry in due course. The incumbent also supplies Bs, and there are independent B-suppliers around, but suppose that they will go out of business if the A-

¹⁷ See further Rey and Tirole (2007, section 3.2) and Tirole (2005).

monopolist ties or bundles its As and Bs together, denying them B-demand. Why would the incumbent do that unless it was efficient and in the interest of consumers to do so? Perhaps because the probability of the rival A-supplier entering is substantially lower if the independent B-suppliers have been eliminated.

Choi and Stefanadis (2001) analyse this point in a model of probabilistic entry after investment. Bundling by the A-incumbent diminishes the investment incentives of potential entrants into each market. Carlton and Waldman (2002) explore a related model in which the potential A-rival is also a B-supplier, and where economies of scope between As and Bs are such that the rival will in due course enter the A-market only if it has first competed on the merits in the B-market, which the incumbent's bundling thwarts.

It should be observed that this exclusionary logic is quite separate from the reasons, which are not developed further in this paper, that a firm may have to engage in such practices as exclusive contracts in order to not to lose power to *exploit* its dominance.¹⁸ For example, an upstream firm might have an exclusive contract (or integrate) with a downstream firm as a way of committing not to go on to give better deals to other downstream firms, in which case its market power could unravel.¹⁹ The incumbent's aim here is to prevent its 'one monopoly profit' from evaporating because of weak commitment power. In effect the dominant firm contrives to stop competing with itself. Note that this point, unlike the theme of this section, is not about the exclusion of rivals to the incumbent, though it can entail exclusionary effects in vertically related markets.

3.6 Economics of exclusion: concluding comment

Notions that certain unilateral practices by firms with market power are 'obviously' exclusionary – in a sense that implies economic inefficiency – do not withstand the Chicago critique. However, as has been illustrated above, the *coherence* of theories of inefficient exclusion, consistent with profit-maximizing firms, has been demonstrated by more recent economics. If factual circumstances consistent with those theories were thought almost never

¹⁸ See further Rey and Tirole (2007, section 2.1).

¹⁹ Policy intervention to ban discrimination could in this setting counter-productively help the dominant firm to *bolster* its market power

to arise, then *laissez-faire* would still have practical policy merit.²⁰ Otherwise cases must depend on facts. In particular, a necessary condition for a finding of abuse should be a fact-consistent theory of harm to competition.

4. Predatory pricing

On 30 January 2007 the Court of First Instance in Luxembourg dismissed the appeal by France Télécom against the Commission's decision in 2003 in what is known as the *Wanadoo* case.²¹ The Commission had found that Wanadoo Interactive, part of France Télécom, had abused a dominant position in the French market for high-speed internet access for residential customers by predatory pricing. The case provides a setting in which to consider the economics and EC law of predatory pricing.

Wanadoo contested various aspects of the Commission's decision, including the finding of dominance in this fast-growing market, which was very new in 2001 when the questioned pricing conduct began. The following discussion will however focus on the assessment of abuse (paragraphs 122-230 of the judgment). Paragraph 130 states the law:

“It is clear from the case-law on predatory pricing that, first, prices below average variable costs give grounds for assuming that a pricing practice is eliminatory and that, if the prices are below average total costs but above average variable costs, those prices must be regarded as abusive if they are determined as part of a plan for eliminating a competitor”²²

In carrying out its cost analysis, the Commission spread the ‘non-recurrent variable costs’ of acquiring customers over four years, somewhat less than the average duration of subscriptions in the event. On that basis the Commission found that Wanadoo priced below its variable costs until August 2001, and below full costs until October 2002. Wanadoo argued that comparison of costs and revenues over a longer period was required to test below-cost pricing, especially given the new and dynamic nature of the market, but the Court at paragraph 152 ruled that costs and revenues after the relevant conduct (i.e. after October 2002) cannot be included in the calculations. On that approach much investment would

²⁰ Recall Judge Easterbrook's position on whether US antitrust law should recognise a pure theory of leverage.

²¹ *France Télécom SA v Commission*, T-340/03 [2007].

²² Citing *AKZO v Commission*, C-62/86 [1991], and the *Tetra Pak* cases, above all *Tetra Pak v Commission*, C-333/94 P [1996].

appear to be at risk of being found ‘predatory’. Assessment of abuse must concern the position of the firm at the time of the alleged abuse, but where investment-related activity is concerned, that position includes reasonable expectations as to future revenues and costs; and how events turned out may be informative, though not decisively so, about the reasonableness of such expectations.

Wanadoo next argued that it had a right to align its prices on its competitors’ prices. The Court at paragraph 187 denied such an absolute right and held that beyond some point price alignment might become abusive. That conclusion does make economic sense. For example, a more efficient rival could be inefficiently deprived of custom if an unqualified matching right existed.

Finally on abuse, Wanadoo made related arguments that its pricing showed no predatory intent, that consumers benefited from low prices and were not harmed, and that the Commission failed to show (and in the circumstances of the market could not show) recoupment – the ability to recoup short-term losses by reducing competition in the longer term. The judgment at paragraph 197 said:

“It is clear therefore that, in the case of predatory pricing, the first element of the abuse applied by the dominant undertaking comprises non-recovery of costs. In the case of non-recovery of variable costs, the second element, that is, predatory intent, is presumed, whereas, in relation to prices below average full costs, the existence of a plan to eliminate competition must be proved”.

From an economic perspective, this passage is doubly perplexing. First, it suggests that eliminatory intent, independent of anti-competitive effect, is a basis for a finding of abuse (despite the Courts saying that abuse is an objective concept). Second, as indicated in section 3.1 above, besides the difficulty of discerning intent, all sorts of manifestly pro-competitive behaviour may be motivated by eliminatory intent, so that concept is not altogether helpful in drawing the line between pro- and anti-competitive conduct.

Is there nevertheless an economically defensible case for doing without a requirement to show probable recoupment before finding predatory pricing abuse? Arguably there is if (i) dominance was established to a stringent standard, and (ii) pricing is below variable (or avoidable) cost without objective justification, and (iii) the below-cost pricing is in the

dominated market. Ability to recoup would seem to be more or less implied by the joint occurrence of (i) to (iii). For example, recoupment requires barriers to (re-)entry, but those must exist if dominance has been established to a stringent standard. Even so, there may still be merit in examining recoupment as a cross-check on the initial finding of dominance. Of course, if dominance is found only to a lax standard, then recoupment should be required to prove predatory abuse. Far better, though, to raise dominance standards generally.

What if (ii) does not hold, say because the pricing is between avoidable and average total cost (presumably with some allocation of overheads in the multi-product case)? Then it would seem important to show recoupment in order to help distinguish between plans to eliminate competitors that are merely competition on the merits²³, and plans to eliminate competition with a view to subsequent price increases to the detriment of consumers – the kind of elimination that competition law should, at least on an effects-oriented view, be concerned about. On this view, then, it would be necessary (but not sufficient) to demonstrate probable recoupment as an element of proving the existence of a plan to eliminate competition.

The relevance of (iii) is that conduct can sometimes be found to constitute abuse even if it does not occur in the relevant product market in which dominance has been found. Thus the Court of Justice in *Tetra Pak II*²⁴, saying that it would be inappropriate in the circumstances of that case to require in addition proof of a realistic chance of recouping losses from below-cost pricing, held that:

“Application of Article [82] presupposes a link between the dominant position and the alleged abusive conduct, which is normally not present where conduct on a market distinct from the dominated market produces effects on that distinct market. In the case of distinct, but associated, markets, application of Article [82] to conduct found on the associated, non-dominated, market and having effects on that associated market can only be justified by special circumstances. An undertaking which enjoys a quasi-monopoly on certain markets and a leading position on distinct, though closely associated, markets is placed in a situation comparable to that of holding a dominant position on those markets as a whole. Conduct by such an undertaking on those distinct markets which is alleged to be abusive may therefore be covered by Article [82] of the Treaty without any need to show that it is dominant on them.”

²³ Prices below avoidable cost by a dominant firm are presumptively not competition on the merits in the absence of objective justification, whereas prices above avoidable cost, even if below total cost, might be competition on the merits without further justification.

²⁴ *Tetra Pak v Commission*, C-333/94 P [1996]

It is hard to know what to make of this. It would have been more straightforward to show that the firm actually was dominant – not just infer that it was comparable to being so – on the markets as a whole. Then the issue of abuse on non-dominated markets need not have been opened up. Now that it has been, a very cautious approach towards predatory pricing abuse on non-dominated markets would seem appropriate, requiring a demonstration of recoupment among other things. Otherwise dominant firms in some markets would be unduly and unreasonably deterred from offering good deals to customers in others.

None of this is to say that the calculus of recoupment should be confined to the market in which the below-cost pricing occurred. As was highlighted by the judgment of the US Court of Appeals quoted in section 3.1, predatory pricing in one market can be rapidly recouped in others, for example through reputation effects.

Wanadoo sought to justify its low pricing in terms of economies of scale and learning effects, but the Court ruled that these considerations did not call into question the finding of abuse because a firm that engages in predatory pricing “may enjoy economies of scale and learning effects on account of increased production precisely because of such pricing” (paragraph 217). Though appeal to such economies obviously cannot exempt a dominant firm from the requirements of Article 82, their dismissal in these terms is troubling. When learning effects matter, there is nothing intrinsically sinister about pricing low to sell more to get costs down. Indeed on the face of it that is both pro-consumer in the short term and pro-efficiency in the longer run. In principle the benefit of future cost reduction should be added to price, or subtracted from short-term cost, in formulating the below-cost pricing test in the first place. In any case, if such gains flow from the low pricing, that is a benefit of it, which should not be ignored.

France Télécom has appealed to the European Court of Justice against the *Wanadoo* judgment of the Court of First Instance. The grounds of appeal include the calculation of cost recovery, the time horizon for cost and revenue assessment, and the recoupment question. The Court of Justice therefore has an opportunity to develop and clarify EC law on predatory pricing.

5. Discounts and rebates

In March 2007 the Court of Justice dismissed the appeal by British Airways (BA) against the 2003 judgment of the Court of First Instance upholding the Commission's 1999 decision, following complaints by Virgin, that BA had abused a dominant position as a purchaser in the UK market for travel agency services. The abuse was bonus schemes that (i) rewarded loyalty from travel agents and (ii) discriminated between them, with the object and effect of excluding competitors from UK markets for air travel services. The Commission fined BA 6.8 million euros. BA had appealed to the Court of First Instance on a number of grounds, including dominance – its share of air ticket sales through UK travel agents had declined to below 40%, and other means of ticket sales were growing considerably. But BA's appeal to the Court of Justice focused on the question of abuse.

BA had until 1998 operated marketing arrangements with UK travel agents with annual BA ticket sales above £500k that involved payments on top of basic commissions based on sales increases from one year to the next. Three very large travel agents had a global agreement based on the growth of BA's share in their worldwide sales. In 1998 BA introduced a new performance reward scheme for travel agents with additional commissions on a sliding scale on sales between 95% and 125% of prior-year benchmarks. None of the bonuses were conditional on exclusivity.

Before the Court of Justice BA argued, first, that the Court of First Instance had wrongly analysed exclusion, having failed to distinguish between customer 'fidelity' based on good deals – a species of normal price competition – and fidelity that excludes by creating artificial barriers for rivals. The Court of Justice said that the case law does give indications as to when discount or bonus schemes, though not conditional on exclusivity, give rise to an exclusionary effect. These include payments linked to the attainment of sales objectives defined individually, the 'very noticeable effect at the margin' for a travel agent near a threshold (since discounts applied to all, not just incremental sales), and BA's size relative to others. BA then contended that its discounts were economically justified and efficient because they increased sales and so helped cover the fixed costs of airline operation. The Court of Justice dismissed the fixed cost point because that was an issue of fact, so not for it to consider.

BA's second plea was that the Court of First Instance had failed to consider the probable effects of the discount schemes, and evidence of absence of significant effect on competing airlines. The Court of Justice held that a finding of fidelity-building effect could be made on the basis of the mechanism of the schemes, in particular those arising from the very noticeable effect at the margin and the resulting possibility of disproportionate reductions in commission at threshold points. BA's third plea that prejudice to consumers had not been considered was also dismissed briefly on the grounds that Article 82 is aimed not just at direct consumer harm but also detriment through the impact of practices on an effective competitive structure. BA was equally unsuccessful in its other pleas, including its claim that it was wrong to find discriminatory distortion of competition among travel agents just because two with the same BA ticket sales might get different commission levels (arising from different prior years).

The US courts, by contrast, took an entirely different view of related allegations that BA's incentive arrangements with travel agents and also corporate clients were predatory foreclosure. In *Virgin v British Airways*, the Court of Appeals for the 2nd Circuit upheld summary judgment against Virgin for lack of factual evidence and failure to show consumer harm. The Court adopted an emphatically pro-consumer view of competition. It applied the *Brooke Group* test of predatory pricing, mentioned above, and held that Virgin had shown neither below-cost pricing nor recoupment. Virgin's monopoly leveraging claim was likewise dismissed for lack of proof. Note that the trans-Atlantic contrast between these cases is not just that BA lost in the EC but won in the US – it got summary judgment in the US, so the case did not even reach a trial of factual issues.

It is no criticism of the European Court of Justice that it did not engage in factual questions, because that is not its role. Its defence of the Court of First Instance's non-engagement with facts is nonetheless striking. Inspection of the mechanism of the discount schemes, particularly 'the very noticeable effect at the margin', seems largely to have sufficed for the EC Courts to infer anti-competitive effect and indirect consumer harm. This approach is to avoid testing the theory of harm against the facts of the marketplace. It is to shun those facts and to stake all on inferences drawn from the inherent features of the discount scheme. It is also to shun a serious assessment of justifications of the schemes in terms of efficiency and

the consumer interest. Discount schemes are natural and can well be desirable when there are substantial fixed costs. Of course it is a matter of (sometimes self-evident) fact whether fixed costs are significant in a given industry, but that is no reason for even an appellate court to dismiss considerations arising from such costs. Moreover, one looks in vain in the judgments for the principles by which competition on the merits is to be distinguished from abuse. Customer loyalty by itself is as consistent with the former as the latter.

Perhaps a key is to understanding the readiness of the EC Courts to uphold the finding of abuse is the oft-repeated very noticeable effect at the margin. It is true that at threshold points there can be well-below-cost, indeed negative, implied prices on small increments of sales. But that is not enough for a coherent theory of anti-competitive harm. One would also need to show that a large proportion of travel agents were very close to such threshold points. It might be said that the thresholds might have some effect even on agents not very close, and that larger increments of sales need to be assessed. But then the ‘very noticeable effect’ softens. In sum, the very noticeable effect may apply to too few travel agents itself to be of competitive significance in the market as a whole. No short-cut answer is available from there being a sharp effect at some margins. A fuller analysis is needed.

None of this is to say that the European BA case necessarily reached the wrong outcome. The point is rather that the analysis used to reach conclusions that BA’s discount scheme was abusive was seriously incomplete if economic effects to the detriment of consumers and/or as-efficient rivals are important in distinguishing between abuse and competition on the merits. It might be said that more factual analysis is too demanding. But if fact-light assessment is wanted, it is far from obvious that *laissez faire* is worse than formalistic intervention to condemn discount schemes not conditional on exclusivity.

6. Refusal to supply, tying and bundling

The *Microsoft* judgment delivered by the Court of First Instance on 17 September 2007 upheld the Commission’s decision in March 2004 that Microsoft had abused a dominant position in the worldwide market for client PC operating systems by (a) refusing to supply and authorise the use of ‘interoperability information’ for rivals to develop competing products on the market for work group server operating systems, and (b) tying Windows

Media Player with the Windows client PC operating system. The Commission imposed a fine of 497.2 million euros, with more to follow when Microsoft did not fully comply with the remedies imposed. Those required Microsoft (i) to supply interface information to allow non-Microsoft workgroup servers to be fully interoperable with Windows PCs and servers, and (ii) to offer to OEMs a version of the client PC operating system without Media Player (on terms not less attractive than the bundled version, which Microsoft remained free to provide). On 22 October Microsoft said that it would not appeal against the CFI judgment and announced a package of measures to comply with the Commission decision.

Before reviewing the economics²⁵ and EC law of the kinds of ‘non-price’ abuse at issue in this case, two prior cases deserve particular mention. First, there are striking parallels to note between the *Microsoft* case and the EC *IBM* case of the early 1980s, which also concerned issues of refusal to supply interface information and bundling by a major US corporation with market power by virtue of a prevailing *de facto* computer standard (relating to IBM’s System/370 network architecture).²⁶ The *IBM* case was settled by an Undertaking in 1984, without the Commission issuing a decision. IBM undertook to release interface information in a timely manner and to offer System/370 CPUs without main memory (while retaining design freedom and the right also to offer CPUs with main memory). Second, there is of course the US *Microsoft* case.

6.1 *The US case*

It is particularly instructive to consider the Court of Appeals judgment in June 2001 in the US *Microsoft* case.²⁷ The Court first upheld the finding that Microsoft had monopoly power in the market for Intel-compatible PC operating systems worldwide on the basis of its share of that market coupled with the ‘applications barrier to entry’ – the network externalities that ensure that applications software will tend to be written for the dominant Windows standard, thereby reinforcing its dominance.

²⁵ One of a number of economic analyses of the EC *Microsoft* case is Kühn and van Reenen (2007).

²⁶ A comparison of the European *IBM* and *Microsoft* cases will be the subject of a separate paper.

²⁷ *United States v Microsoft*, 253 F.3d 34 (D.C. Cir. 2001). Economic analyses of the case include Whinston (2001) and Rubinfeld (2004).

As to abuse (to use the EC term) the Court said that “[t]he challenge for an antitrust court lies in stating a general rule for distinguishing between exclusionary acts, which reduce social welfare, and competitive acts, which increase it”. Five principles from US jurisprudence were then stated to help address that question:

- (i) To be condemned as exclusionary a monopolist’s acts must harm the competitive process and thereby consumers; harm to competitors will not suffice.
- (ii) The plaintiff must demonstrate such anti-competitive effect.
- (iii) Then the monopolist may proffer a pro-competitive justification.
- (iv) If that stands unrebutted, the plaintiff must then show that anti-competitive harm outweighs pro-competitive benefit.
- (v) The focus is on effects not intent; evidence on intent is relevant only insofar as it helps predict effect.

Central to the US case was whether Microsoft had unlawfully thwarted Netscape’s Internet Navigator browser (and Sun’s Java technology) in order

- (a) to protect its Windows operating systems monopoly (‘monopolization’), and/or
- (b) to extend its Windows operating systems monopoly to browsers (‘attempted monopolization’).

A further question was whether Microsoft had unlawfully tied its Internet Explorer browser to its Windows operating system.²⁸

As to (a) the Court upheld many of the findings of the lower court (in a manner rather consistent with the maintenance of market power theory of section 3.5 above):

“Microsoft’s efforts to gain market share in one market (browsers) served to meet the threat to Microsoft’s monopoly in another market (operating systems) by keeping rival browsers from gaining the critical mass of users necessary to attract developer attention away from Windows as the platform for software development”.

These efforts of Microsoft, which lacked pro-competitive justification, included aspects of the following: restrictive licensing conditions with OEMs (i.e. PC makers, so a key route to market); the integration of Explorer with Windows; agreements with internet access providers; dealings with internet content providers, independent software vendors and Apple;

²⁸ The tying allegation came under section 1 of the Sherman Act, which concerns anti-competitive agreements, rather than section 2, which concerns monopolization.

and actions to thwart Java. The Court however dismissed the claim that Microsoft had unlawfully attempted to monopolize the browser market on the grounds that plaintiff had not proven a dangerous probability of achieving monopoly power in that (putative) market. (This is like a recoupment point.) In short, the Court did not find leverage theories (of the sort sketched in section 3.4 above) demonstrated by the facts.

As to the tying claim, the question before the Court was whether *per se* or rule-of-reason analysis was appropriate for platform software products. They said the latter. The separate-products principle laid down by the Supreme Court in *Jefferson Parish*²⁹ is that there is no tying subject to *per se* liability unless there is sufficient demand for the tied product separate from the tying product to identify a distinct product market in which it is efficient to supply the tied product separately. This test applied to integration of platform software products did not suggest that they were not separate, but the Court concluded that as a general matter their bundling could not be said to have so little ‘redeeming virtue’ as to warrant *per se* condemnation. The Court accordingly remanded the tying question back for (structured) rule-of-reason, rather than *per se*, assessment.

Following the Court of Appeals judgment, the US Justice Department (and some but not all states) agreed a settlement with Microsoft in November 2001, which received court approval in a Final Judgment a year later. Microsoft agreed, among other things, (a) to specify and license to third parties some communications protocols needed to interoperate with Windows client PC operating systems, and (b) to allow OEMs and end-users to substitute competing alternatives to Microsoft’s ‘middleware’ – i.e. software that bridges between the operating system and applications. Many have doubted the effectiveness of the US settlement, but Court of Appeals in 2004 upheld the district court’s approval of the remedies³⁰ and the view of the Justice Department is that they have succeeded in promoting competition and consumer choice.³¹

²⁹ *Jefferson Parish Hospital Dist. No. 2 v. Hyde*, 466 U.S. 2 (1984).

³⁰ *Massachusetts v. Microsoft*, 373 F.3d 1199, 1243 (D.C. Cir. 2004).

³¹ Press release of 30 August 2007 in connection with DoJ’s review of the Final Judgments. The remedies are due to expire in November 2007 but some (e.g. relating to protocol licensing) have been extended. In an amicus brief filed on 9 November the DoJ urged the District Court to deny motions from certain States, including California and New York, calling for general five-year extensions of the Final Judgments.

6.2 *The EC case: refusal to supply interoperability information*

Microsoft denied that its refusal to supply interoperability information was abusive on the grounds that the information was protected by intellectual property (IP) rights, and that the narrow criteria in the case law for holding the refusal to license IP to be abusive were not satisfied by the facts of the case. In any event, it argued, the refusal was objectively justified by consideration of innovation incentives. The Commission, while not conceding that the information was protected by IP rights, adopted its decision on the assumption favourable to Microsoft that it was.

A line of cases has established that although firms are generally free to choose with whom they deal, there are certain circumstances in which a refusal to supply can be an abuse. Only exceptionally, however, has refusal to supply IP been found to be abusive – rightly so since the essence of IP is the right to exclusive use.³² In *Magill* television companies were held to have abused dominance by refusing to supply (copyrighted) weekly programme listings so that third parties could supply multi-channel weekly TV guides, and *IMS Health*, where the Court of Justice gave a preliminary ruling on points of law, concerned IP rights over the geographical format or ‘brick structure’ by which German pharmaceutical sales data were presented.³³

The *Microsoft* judgment, summarising this and related of jurisprudence, says at paragraph 332 that circumstances are exceptional if three tests are met – indispensability, exclusion of effective competition, and prevention of the appearance of a new product for which there is potential demand. The last of these conditions is found only in the case law on refusal to supply IP rights: in other contexts abuse can be found without it holding.

The Commission in its decision, while contending that the three *IMS* tests were met, had warned that their automatic application would be problematic, saying that the entirety of the

³² The Courts have distinguished between the exclusive right and its exercise. It is the latter which may be abusive in exceptional circumstances.

³³ *RTE and ITP v Commission*, C-241&242/91 P [1995] (*‘Magill’*), and *IMS Health*, C-418/01 [2004].

circumstances must be subject to comprehensive examination.³⁴ For the Commission these included the disruption of previous supply of interoperability information, the great importance of interoperability in software markets, Microsoft's extraordinary power arising from its client PC operating system standard leading to the rapid attainment also of dominance in work group server operating system. In that regard the Commission decision (at paragraphs 764ff) explicitly addressed the 'one monopoly profit' argument. As to the leverage of monopoly (see section 3.4 above) the Commission said that the 'one monopoly profit' argument relies on strong assumptions that do not hold in the case at hand. But then the Commission stressed incentives to *maintain* monopoly (see section 3.5):

“[A] future competitor in the client PC operating system market will need to provide products interoperable with Microsoft's dominant work group server operating system. As such, by strengthening its dominant position in the work group server operating system market, Microsoft effectively reinforces the barriers to entry in the client PC operating system market” (paragraph 769).

In economic terms, this point is in very much line with the monopoly maintenance theory of harm to competition upheld by the US Court of Appeals.

Despite the Commission's emphasis on the desirability of appraising the entirety of the circumstances, the Court of First Instance proceeded straight to consider Microsoft's refusal to supply against the three *IMS* tests, deferring the wider exceptional circumstances invoked by the Commission for consideration only if one or more of the *IMS* tests was not satisfied (paragraph 336). The Court found that the Commission had not erred in concluding that each test was satisfied. First, interoperability on an equal footing is indispensable for rivals to compete viably. Second, otherwise there is a risk that competition will be eliminated. Third, the Commission was not manifestly incorrect to find that the refusal to supply would limit technical development – hence new products – to the prejudice of consumers. As to objective justification, the Court considered that Microsoft had failed to show that requiring disclosure of interoperability information would have a negative effect on its incentives to innovate.

³⁴ See, for example, paragraph 316 of the CFI judgment. The immediately preceding paragraph records Microsoft's reliance on the *Magill/IMS Health* tests. Ironically, the Court adopted precisely the tests urged by Microsoft, but of course reached the opposite conclusions on them.

In sum, the Court judged that “the exceptional circumstances identified by the Court of Justice in *Magill* and *IMS Health* ... were also present in this case” (paragraph 712). Thus the automatic application of the *IMS* tests, which the Commission had warned would be problematic, sufficed to dismiss Microsoft’s plea, and there was no need to consider the wider exceptional circumstances invoked by the Commission.

Indeed the Court commented (at paragraph 559) that even if the Commission had been wrong to find that Microsoft had a dominant position in the market for workgroup server operating systems, that would not have undermined a conclusion of abuse because the abuse stemmed from, and concerned ‘leveraging’ of, dominance in the market for client PC operating system software. The Court saw the *IMS* test relating to the prevention of a new product rather broadly in terms of Article 82(b), which prohibits limiting production, markets or technical development to the prejudice of consumers. As to prejudice to consumers, the Court (at paragraph 664) noted that indirect prejudice via market structure is possible and then made the extraordinary statement that “Microsoft impaired the effective competitive structure on the workgroup server operating systems market by acquiring a significant share on that market”.

The earlier cases of *Magill* and *IMS Health* had concerned information in the public domain – TV listings and a map grid – that appear to have been largely by-products of other activities requiring little if any creative effort. The context of Microsoft’s interoperability information is very different. Yet the Court found with relative ease that the “exceptional circumstances” of those cases, and the *IMS* test in particular, were satisfied by the facts in *Microsoft* (without even needing to attend to some truly exceptional features of Microsoft’s position). This suggests that such circumstances are not nearly as exceptional as previously thought.

All this leaves two major questions for the future. What now is the principle that limits dominant firm duties to supply their rivals with access to important inputs? When such a duty applies, at what price must the input be supplied?

6.3 *The EC case: bundling of Media Player*

The Court upheld the Commission's four-part test to address determine the question of bundling/tying abuse. First, Microsoft had a dominant position in the tying product (client PC operating system software). Second, the tied product (Windows Media Player) was separate by reference to consumer demand. Third, consumers could not buy the tying product without the tied product. Fourth, competition was foreclosed because Microsoft offering OEMs Windows with Media Player bundled gave it an unparalleled distribution advantage, with the result that third-party media players could not compete on the merits through OEMs. (This conclusion was reached notwithstanding the fact that OEMs and end-users are free to install third-party media players, which have had considerable success in the marketplace, including through the OEM channel.) The Court held that Microsoft had bundled without objective justification, noting that it remained free to offer a bundled version so long as an unbundled version was offered too.

Following the Commission's decision, Microsoft has indeed offered an unbundled version – albeit it at the same price as the bundled version – for which there had been (unsurprisingly) little demand. A remedy requiring an unbundled version, while allowing continued bundling, is of questionable effectiveness without a required price difference between the two versions. Some would go further and say that the ineffectiveness of remedy itself calls into question the finding of abuse. What could the required price difference have been? One candidate is avoidable cost, but the avoidable cost of adding Media Player to Windows is likely to be very small indeed. It is arguable that a required price difference larger than avoidable cost would have been an appropriate remedy, especially bearing in mind that remedial measures may well go further than requiring cessation of abuse. But the Commission did not enter the business of price difference regulation.

All this suggests that the bundling abuse finding in the EC *Microsoft* case is of less significance than that relating to interoperability, being relatively easy but largely ineffective to remedy, at least without the apparatus of (price difference) regulation. Matters would have been quite different if it had been found abusive for Microsoft to supply a bundled version at all, and so been required to supply unbundled only. But then Microsoft would have had a powerful objective justification in terms of efficiency and consumer welfare.

It will be apparent from the above that the ‘non-price’ abuses of refusal to supply and tying/bundling are necessarily to do with price. If it is held to be abusive to refuse to supply in some context, the remedy is presumably an obligation to supply. But that obligation is without practical meaning unless the price of supply is capped. Then it would seem that the abuse is refusal-to-supply-on-reasonable-terms – a price abuse in other words. Likewise the bundling abuse is a form of refusal to supply, namely refusal to supply an unbundled version. But if a bundled version can be supplied in parallel, the issue again comes down to price, in particular the price difference between the bundled and unbundled versions. The fact that pricing obligations are difficult to specify and enforce is a further reason to be cautious about imposing obligations to supply.

7. Article 82: the future

The EC Courts were a helpful spur to the reforms of European policy and practice towards mergers, especially between 2002 and 2004. There is no indication from the *Microsoft* judgment, nor from *Wanadoo* nor *British Airways*, that they will play a similar role in relation to Article 82. So after fifty years of the Treaty are we stuck? That now depends primarily upon the Commission. That the *Microsoft* Court has not taken a lead in reforming the policy and practice of Article 82 makes it all the more important that the Commission does so.

With the *Microsoft* case in train the Commission has been understandably reticent about Article 82 policy for the past two years. But on 28 November the Commission adopted guidelines on non-horizontal mergers (European Commission, 2007). If, as I hope, there are to be guidelines on the application of Article 82, at least as regards exclusionary abuse, they would do well to mirror some broad features of the non-horizontal merger guidelines.³⁵ The first is that they are explicitly consumer-oriented throughout, with competitor protection explicitly rejected: ‘the fact that a merger affects competitors is not in itself a problem’ (paragraph 16). Accordingly, the focus of concern is *anti-competitive* foreclosure – i.e. where as a result firms can profitably increase price. Second, the guidelines are clear that non-horizontal mergers provide substantial scope for efficiencies. The same is also true of a

³⁵ These points and others are discussed in my note, which is available on request, on ‘A reformed approach to Article 82 EC’ for the 12th EUI Competition Law and Policy Workshop, Florence, 8-9 June 2007.

range of unilateral practices by firms with market power. Third, they spell out the principal mechanisms of harm to competition (as to which see section 3 above), and identify some of the crucial questions of fact that theories of harm to competition must face.

The importance and impact of Article 82 over the next fifty years will of course turn on technological and market developments as well as on what happens in competition authorities and courts. The Commission nevertheless has an unusual opportunity now to shape the contours of future public policy towards firms with market power, and to complete the economics-based reform of EC competition law enforcement.

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