Handbook of Research in Trans-Atlantic Antitrust

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9 Tying: a transatlantic perspective

David W. Hull[1]

Introduction

At a time when the European Commission is rethinking its policy on the abuse of dominant position under Article 82, the law on tying is particularly ripe for reform. In the antitrust field, tying stands out as an area where there is a stark divergence between what the law is as set out in the case law and the general consensus in the antitrust community on what the law should be. In both the United States and the European Union, tying is generally analyzed under some form of a per se rule, while the consensus in the antitrust community is that it should be analyzed under the rule of reason, which allows for a more robust economic analysis that considers effects on the market and possible efficiencies.

In recent years, the need to bring the law on tying into line with contemporary economic thinking has generated extensive commentary among antitrust lawyers and economists. The explanation for this may be that tying is at the heart of both the US and EU versions of the recent *Microsoft* case. While any key issue in such a prominent case is likely to attract extensive comments from the antitrust community, this is particularly true with tying in this case.[2] First, the tying involved in *Microsoft* is the kind of tying that is generally recognized as generating various efficiencies, thus underscoring the shortcomings of a per se approach. Second, *Microsoft* highlights the need to find a workable approach to tying because tying is of central importance in an economy that is characterized by increasing product integration and convergence, particularly in high-tech sectors such as information technology and consumer electronics.

As discussed below, the decisions on both sides of the Atlantic in the *Microsoft* case suggest that the law in both the United States and the European Union is moving towards a rule-of-reason approach. The law remains in an unsatisfactory state, however, both because it is unclear to what extent this more flexible approach has broader application beyond the facts of *Microsoft*, and because the features of the optimal test remain unclear. Consequently the Commission's review of its approach to abuse of dominance under Article 82 with a view to issuing guidelines is a welcome exercise as guidelines could help answer these questions and bring the law more into line with current economic thinking.

This chapter has two goals. First, it summarizes how tying is treated under current economic theory and the state of the law on tying in the United States and the European Union. A comparison of the approaches to tying on both sides of the Atlantic should provide greater insights into the issues, and tying would seem to lend itself to a transatlantic comparison as both jurisdictions recently have had to deal with a similar set of facts in *Microsoft*. Second, with this background, it makes some recommendations as to the general contours of an optimal approach to tying and suggests some areas that might merit further inquiry as the Commission moves forward with its Article 82 review.

The economics of tying

While economics has long been a mainstay of US antitrust analysis, it has only recently come to the fore in Europe. In the past few years, the EU competition rules governing restrictive agreements covered by Article 81 (e.g. vertical agreements, intellectual property licences, horizontal agreements) and mergers falling within the scope of the EU Merger Regulation have undergone major reforms in an effort to inject greater economic analysis. Article 82 seems to be on the brink of a similar sea change with the European Commission's commencement of a review of its policy under Article 82. In December 2005, the Commission issued a Discussion Paper that clearly favors an economics-based approach as opposed to a legalistic, form-based approach.[3] As part of this project, the Commission commissioned a study by a group of prominent European economists, which was released in July 2005, and which, not surprisingly, argues in favour of an effects-based approach to Article 82.[4]

Although a thorough discussion of the economics of tying is beyond the scope of this chapter, it is useful to review briefly the evolution of economic thinking on tying, and particularly the harms and benefits of tying that have been identified by economists.[5] Initially, economists were hostile to tying, viewing it as nothing more than a means for a dominant firm to extend its market power in the tying market to the tied market. Chicago School economists challenged this traditional view, arguing that tying was rarely harmful. They reasoned that a dominant firm generally could not use its dominant position in the market for the tying product to extract monopoly profits on the market for the tied product because it only had one monopoly and, if it tried to extend its monopoly, could wind up undermining it. Chicago School economists also pointed out that tying could achieve a number of efficiencies, some of which are listed below. More recently, post-Chicago School economists have challenged this view, arguing that there are circumstances in which the Chicago School's theory does not hold true, particularly when the tied market is not perfectly competitive.

While the debate on the optimal approach to tying is not yet over, there seems to be general agreement on the main benefits and harms associated with tying. The two main anticompetitive effects that have been identified are as follows:

- *Monopolizing the tied good's market*: a principle anticompetitive effect is leveraging the firm's dominance in the tying product's market to increase profits and foreclose competition in the tied product's market.
- *Protecting the monopoly in the tying good's market*: another anticompetitive effect frequently identified by economists is preservation of the firm's dominant position in the tying market. In this case, the dominant firm is concerned that a competitor will first establish its position on the tied product's market and later enter the tying product's market.

The main efficiencies generally associated with tying are as follows:

- *Lower production costs*: tying may lead to lower production costs by allowing manufacturers to achieve economies of scale.
- *Lower transaction costs*: tying reduces the transaction costs of buying the two products separately. For example, it is easier for consumers to buy software applications that are bundled rather than shopping for each separately.
- *Lower distribution costs*: tying may lead to a reduction in distribution costs in that it may be cheaper to package, ship and invoice products as one unit than separately.
- *Quality improvement*: tying may lead to an improvement in the quality of the product. For example, the success of PC manufacturers in selling a bundled product that consists of the PC, the screen, the keyboard, the mouse and other peripherals is at least partly attributable to the perception that there will be fewer glitches with hardware components designed to work together as opposed to the situation where each component is purchased separately. Such quality considerations are particularly relevant in high-tech products where technological integration is important.
- *Pricing*: tying may result in more competitive pricing for the bundled product than could be achieved if each product were sold separately. In cases where tying is used as a metering device (e.g. photocopiers and paper), it enables the seller to measure the demand for the product and tailor its pricing strategy accordingly. Economists have shown that this ability to discriminate among customers can be beneficial for some of them.

Since economists continue to debate various aspects of tying such as the precise harms and benefits associated with it, how often they arise, and how they can be measured, it may be going too far to say that they agree that tying is generally beneficial and only rarely harmful.[6] It would seem safe to say, however, that a broad consensus has emerged on at least one point: tying is not generally anticompetitive because, more often than not, it gives rise to efficiencies. Even a consensus on this limited point is useful in fashioning the best approach to tying. As discussed below, if tying is not generally anticompetitive, a per se rule – even a watered-down per se rule – would not appear to be the best approach to evaluating tying practices.

The legal tests

Overview

This section reviews the legal tests for tying that have been developed in the United States and the European Union. The two jurisdictions are similar in that the prevailing test in each is a per se test, but the recent decisions on each side of the Atlantic in *Microsoft* suggest that each jurisdiction may be moving towards a rule-of-reason test. However drawing parallels between the jurisdictions based on labels assigned to the tests can be misleading. The US courts have developed a per se test that sometimes works more like a rule-of-reason test because it allows the consideration of factors that typically would only be taken into consideration under a rule-of-reason test. For its part, the European Commission has developed what it labels a rule-of-reason test, but which operates more like a version of the per se test because it places such a heavy burden of proof on the defendant.

US law

(a) A peculiar per se test Initially, US courts were hostile to tying and applied a strict per se test under which it was sufficient to show that a tying arrangement existed and that it affected a 'not insubstantial' volume of trade. This early hostility to tying is evident in this widely-quoted passage from the US Supreme Court's judgment in *Northern Pacific Railway*:

> Among the practices which the courts have heretofore deemed to be unlawful in and of themselves are . . . tying arrangements. . . . Indeed, 'tying arrangements serve hardly any purpose beyond the suppression of competition.' . . . They are unreasonable in and of themselves whenever a party has sufficient economic power with respect to the tying product to appreciably restrain free competition in the market for the tied product and a 'not insubstantial' amount of interstate commerce is affected.[7]

While this quotation suggests that it was necessary to show market power over the tying product, in practice, this was often inferred from the existence of a tie.[8]

This approach to tying analysis was condemned by Chicago School economists. Robert Bork's *The Antitrust Paradox*, which is known for its scathing criticism of many antitrust principles that were widely accepted at the time of its publication in 1978, reserved particularly stinging remarks for the strict per se approach to tying:

> A review of the cases reveals the sterile circularity of the law's reasoning, the untenability of its premises, and the error of its most assured pronouncements. These matters have been repeatedly and conclusively demonstrated by a number of commentators, yet the law remains majestically impervious to any critical analysis.[9]

Over time, US courts have moved away from the strict per se test that was the object of Bork's criticism, watering it down to the point that it is now described as a 'highly idiosyncratic'[10] or 'modified' per se rule. Under a pure per se rule, once conduct is shown to occur, it is condemned without regard to proof of market power, effect, intention or possible justifications. For example, a naked price-fixing cartel is deemed to be anticompetitive in virtually all situations. The current per se test applied to tying does not operate like a pure per se test because it is subject to various qualifications that are not usually associated with a per se test. Perhaps the simplest explanation for the departure from a strict per se rule is that courts recognized that tying is ubiquitous and often benign. Consequently a more flexible rule was needed, and courts showed considerable creativity in achieving this flexibility while remaining, at least nominally, within the confines of a per se rule. For example, some courts found that the alleged tying and tied products constituted a single product and, thus, the arrangement was not a tie at all. Others required evidence of power in the tying product's market rather than simply inferring this from the existence of the tie. Still others allowed 'business justifications' to be pleaded as defences.

Perhaps the most prominent example of the movement away from a strict per se rule is the US Supreme Court's judgment in *Jefferson Parish*.[11] In that case, the tying involved requiring a hospital's patients to use the anaesthesiological services of a provider with which the hospital had an exclusive arrangement. The Court moved away from a strict per se test in two respects. First, in determining whether the two-products test was met, it focused on whether there was a separate demand for the tied product rather than on the functional relationship between the two products, which had been the approach in earlier cases. Second, the Court emphasized that the economic power required over the tying product was market power and not some vague notion of economic power. This insistence on proof of market power over the tying product meant that market power could no longer be inferred simply from the existence of a tie. Applying these criteria, the

Court concluded that it was inappropriate to apply the per se rule because Jefferson Parish Hospital did not have the requisite degree of power in the market for the tying product as it controlled only 30 per cent of the market for hospital services; thus the arrangement was subject to examination under a full-blown rule-of-reason analysis.

While the US courts have gradually moved away from a strict per se test, the US Supreme Court thus far has declined to abandon the per se test altogether in favour of the rule of reason, though it declined to do so by only a one-vote margin in *Jefferson Parish*. In *Jefferson Parish*, Justice O'Connor was joined by three other justices in a concurring opinion that argued for the abandonment of the per se approach in favour of the rule of reason, but the majority decided to remain with the per se rule for reasons of *stare decisis*: 'It is far too late in the history of our antitrust jurisprudence to question the proposition that certain tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable per se.'[12] Surely, had Robert Bork written *The Antitrust Paradox* after *Jefferson Parish* was decided, he would have used this statement as an example of just the sort of majestically-impervious-to-any-critical-analysis rationale for a per se approach to tying that he condemned in the passage from his book quoted above.

As *stare decisis* is an argument of last resort, the per se rule may eventually give way to the rule of reason. Faced with lower courts that have either gone through judicial contortions to stay within a per se rule yet achieve results more consistent with a rule of reason, or that have abandoned the per se approach altogether when faced with a novel tying arrangement, as the United States Court of Appeals for the District of Columbia Circuit ('DC Circuit') did in *Microsoft*, discussed below, and with the clear weight of opinion among economists and the academic community in favour of jettisoning the per se approach in favour of a rule of reason, it would not be surprising if the US Supreme Court eventually embraces a rule-of-reason analysis.[13]

In the meantime, however, the controlling test is a per se test that comprises the following four conditions: (1) the tying and the tied products are two separate products; (2) the seller affords customers no choice but to purchase the tied product from it; (3) the seller has market power in the market for the tying product; and (4) the tying arrangement affects a not insubstantial volume of interstate commerce in the market for the tied product.[14] These conditions will be examined in greater detail below in the discussion of the features of the optimal test for tying.

(b) A restrictive rule of reason Judicial dissatisfaction with the per se test is epitomized by the DC Circuit's ruling in *Microsoft* where, when faced with a novel tying claim involving the integration of new features into

platform software, the court abandoned the per se test in favour of the rule of reason under which the anticompetitive effects of the tying conduct must be weighed against the procompetitive justifications.[15] The court found that Microsoft's tying of the Internet Explorer web browser to its Windows operating system was capable of generating efficiencies for which the per se test would be unable to account. For example, tying enables independent software developers to rely on the presence of the web browser's code in the Windows operating system platform so that they do not have to go to the trouble of writing web browser code when writing applications for the platform that would use the web browser. In addition, the court found that the per se test was ill-suited to account for efficiencies generated by new and innovative product integration because the per se test was backward-looking in that it focused on historic consumer demand in determining whether separate demand for the tied product existed. Under the per se test, the first company to integrate previously distinct products would risk being condemned because, at the time of integration, there necessarily would be two distinct product markets. In contrast, a rule-of-reason analysis would give the first mover an opportunity to prove that the efficiency gain from the tie offset any harm resulting from depriving the consumer of the ability to buy the products separately.

In the short term at least, the DC Circuit's opinion is unlikely to have much formal effect on the assessment of tying claims. The court was careful to restrict its ruling to tying cases involving platform software. As a practical matter, this means that its ruling would be unlikely to apply in many cases as few companies have enough market power in platform software to be accused of tying.

In the longer term, the DC Circuit's ruling may well have an influence on the law on tying that goes beyond its narrow confines, particularly in cases involving the integration of new features into high-technology products. As one of the key rulings in the Microsoft saga and one that reflects the prevailing view that the per se test should be abandoned, it has created additional impetus for change. The court's opinion may well have an influence on the development of the law in jurisdictions other than the United States. Indeed the European Commission went out of its way to emphasize that the approach adopted in its decision in *Microsoft* was consistent with that adopted by the DC Circuit.[16] Even if the European Court of First Instance ('CFI') were to follow a different route in ruling on Microsoft's appeal against the Commission's decision, it might well take the DC Circuit's ruling into account in its deliberations and would likely give serious consideration to arguments in favour of a rule that takes into account the effects of tying in the market and the various efficiencies that it can generate.

EU law

(a) A restrictive per se rule Prior to the European Commission's decision in *Microsoft*, which is discussed in the next section, both the Commission and the European Courts (the CFI and the European Court of Justice or 'ECJ') followed a strict per se approach in evaluating tying practices. To establish an illegal tie, it sufficed to show the following: (1) dominance in the tying product market, (2) the existence of two separate products, and (3) that the customer was coerced into purchasing the products together. As in any Article 82 case, the possibility of objective justifications for the practice was also examined, though these were typically given short shrift. There was no serious inquiry into factors that would be taken into consideration in the context of a rule-of-reason analysis such as the risk of foreclosure of competition on the tied product market or possible efficiencies generated by the tying practice.

Compared to the US case law on tying, there is scant EU case law, and the little case law that exists does not provide much guidance. The two leading cases, *Hilti*[17] and *Tetra Pak*,[18] both dealt with relatively 'easy' tying cases involving consumables. In *Hilti*, the Commission found that Hilti abused its dominant position by selling the customer cartridge strips for its nail guns only if the customer also bought its nails from Hilti. In *Tetra Pak*, the Commission found that Tetra Pak had abused its dominant position by conditioning the sale of its packaging machines on the customer's agreement to purchase the cartons used in the machines only from Tetra Pak.

Both of these cases were 'easy' in the sense that the tying and tied products were physically separate products that were not only intuitively distinct, but with respect to which it was easy to show a separate demand in the market. Thus, in both cases, the European Commission and the European Courts had no trouble rejecting arguments to the effect that the tying and tied product formed a single product. In *Hilti*, evidence that cartridge strips and nails were manufactured and sold separately by third parties was used to reject the argument that the nail guns, cartridge strips and nails formed a single powder-actuated fastening system. In *Tetra Pak*, the fact that machines and cartons were sold separately in a closely-related market involving non-aseptic packaging machines (as opposed to the aseptic packaging machines at issue in the case) was used to reject the argument that machines and cartons formed an integrated packaging system.

Hilti and *Tetra Pak* illustrate the per se approach to tying in that there was little attempt to analyze the effects of the practice on the market or possible efficiencies. Moreover, neither the CFI nor the ECJ articulated a coherent approach to tying cases that would provide much in the way of general guidance. The judgments were fact-driven and focused on the discrete issues presented and, because they both involved consumables, they

do not address the kinds of complex issues presented in cases of technological tying, which are likely to arise with increasing frequency.

(b) A peculiar rule of reason In its March 2004 decision in *Microsoft*,[19] the European Commission moved away from the strict per se approach of *Hilti* and *Tetra Pak*, towards a test that takes into consideration the effects of the tying practice in the market for the tied product and allows at least some consideration of efficiencies and procompetitive justifications. The Commission found that Microsoft's tying of its Windows Media Player to its Windows operating system constituted an illegal tie under Article 82. To reach this conclusion, the Commission applied a five-part test: (1) the tying and the tied product are two separate products; (2) the seller is dominant in the market for the tying product; (3) the seller does not give customers a choice of whether to buy the tying product without the tied product; (4) tying forecloses competition; and (5) the absence of any objective justification. While the Commission's formal statement of its test only included the first four conditions, the test actually applied by the Commission included the fifth condition, which is an element to be examined in any Article 82 case.

In its decision, the Commission had little trouble finding that Microsoft was dominant in the tying product market of operating systems and that it had given customers no choice but to take its media player with the operating system. The bulk of the Commission's analysis was focused on whether the Windows operating system and the Windows Media Player were separate products, and on whether the alleged tying arrangement foreclosed competition on the media player market. On the separate products issue, the Commission found that there was separate demand for Windows Media Player as a standalone product and, consequently, the two-products requirement was satisfied. It rejected Microsoft arguments that focused on the high degree of technological integration involved in adding Windows Media Player as a feature of Windows and the absence of demand for the Windows operating system without Windows Media Player.

On the foreclosure issue, the Commission found that, although there was currently competition in the media player market, the alleged tying arrangement had the potential to foreclose competition. In reaching this conclusion, the Commission emphasized the danger that the media player market might eventually tip towards Microsoft. The Commission also rejected the justifications put forward by Microsoft for the tie. In evaluating these justifications, the Commission placed the burden of proof on Microsoft and held it to a very high standard of proof, requiring it to show that the tying was indispensable to achieving the alleged efficiencies, i.e. that it was the only way to achieve these efficiencies.

Comparison of the US and EU rule-of-reason tests

In considering what would be the best approach to tying under Article 82, it is useful to compare the test articulated by the European Commission in the European version of *Microsoft* with the rule-of-reason test adopted by the DC Circuit in the US version of *Microsoft*. As both cases are recent and were heavily litigated with extensive economic evidence being presented, they constitute a fruitful basis for comparison.

At the time that it issued its decision in *Microsoft*, the European Commission emphasized that it had used the same approach as the DC Circuit:

> The Commission has followed a 'rule-of-reason' approach in order to establish whether the anticompetitive effects of tying WMP outweigh any possible pro-competitive benefits. This is precisely the framework for tying cases that the US Court of Appeals laid down in 2001.[20]

While the Commission's decision clearly represents a movement away from the previous strict per se test towards a rule-of-reason approach, it differs in important respects from the US rule-of-reason approach adopted by the DC Circuit in *Microsoft*. On its face, the test articulated by the Commission in *Microsoft* bears greater similarity to the four-part per se test used by most courts in the United States than it does to the DC Circuit's rule-of-reason test. On closer analysis, however, the Commission's test represents a clear movement towards a rule of reason. First, the Commission's test leaves more room for a meaningful examination of the effects of the tying on the market for the tied product. This is because the examination of effect on trade under the US per se test is aimed at the jurisdictional requirement that the practice have the requisite effect on inter-state commerce in the tied product's market rather than the substantive question of market foreclosure. In practice, this has proved to be a fairly low hurdle rather than a rigorous inquiry into whether the anticompetitive harm is substantial enough to be of serious concern.[21] Moreover, as noted above, the test actually applied by the Commission in *Microsoft* included a fifth condition – the consideration of objective justifications and efficiencies – which is more characteristic of a rule-of-reason analysis.

While the consideration of effects and objective justifications brings the European Commission's test closer to a US rule-of-reason test, there is a critical difference: the Commission placed a much heavier burden of proof on Microsoft than would have been the case under the US rule-of-reason approach. The allocation of the burden of proof can have a decisive impact on the effect of a legal standard. In the *Microsoft* case, the burden of proof placed on the defendant was so high that, arguably, it transformed what purported to be a rule-of-reason standard into a per se test. This issue of the burden of proof is discussed in greater detail towards the end of this chapter.

Rethinking tying under Article 82

A doctrine ripe for reform

EU law on tying is in an unsatisfactory state. First, it is unclear what the prevailing rule is. While the ECJ has applied a strict per se approach in tying cases, the European Commission has recently followed a much more flexible test that it has described as a rule-of-reason test. Which test are judges and advisors to follow? Second, the case law does not articulate a coherent approach to tying, both because there are so few cases and because the two leading cases, *Hilti* and *Tetra Pak*, dealt with a narrow subset of tying cases – those where the tied product was a consumable. Third, to the extent that the current approach fails to take into account the full range of efficiencies associated with tying, either because it does not allow such efficiencies to be pleaded or because the burden of proof is allocated in a way that negates the ability of a defendant to plead them effectively, it is inconsistent with the general consensus that the optimal rule would allow for a robust consideration of efficiencies.

Given the shortcomings of the current approach, it would be a welcome development if the European Commission used the issuance of guidelines on Article 82 as an opportunity to reform the law on tying. By issuing guidelines, the Commission has an opportunity to articulate a coherent approach to tying that is more in line with contemporary economics and to inject much-needed certainty into the law. In hopes of informing the debate leading up to the adoption of any such guidelines, this section makes some recommendations as to the contours of the optimal approach to tying. It also attempts to identify areas where it might be particularly useful for the Commission to focus its inquiry.

Per se or rule of reason?

In considering the most appropriate approach to tying under Article 82, the threshold question is whether a per se or rule-of-reason approach should be used. The logic behind applying a per se rule to a particular practice is that, in the majority of cases, the practice is anticompetitive, so that it is not worth the time or effort to examine individual cases. As Justice O'Connor noted in her concurring opinion in *Jefferson Parish*:

> In deciding whether an economic restraint should be declared illegal per se, '[t]he probability that the anticompetitive consequences will result from a practice and the severity of those consequences [is] balanced against its procompetitive consequences. Cases that do not fit the generalization may arise, but a per se rule reflects the judgment that such cases are not sufficiently common or important to justify the time and expense necessary to identify them' . . . Only when there is very little loss to society from banning a restraint altogether is an inquiry into its costs in the individual case considered to be unnecessary.[22]

From this perspective, tying does not lend itself to a per se analysis. As discussed above, while the debate on the economics of tying continues, economists seem to be in agreement on one point: tying is not anticompetitive in the majority of cases. Judges, whether intuitively or using economic analysis, also seem to have come to this conclusion. The evolution of the case law in both the United States and the European Union reflects a recognition that tying often entails procompetitive benefits and that the legal rule must be flexible enough to take these benefits into account. In the United States, the courts have moved away from a strict per se approach to a more flexible per se approach that examines rule of reason-like criteria and, in *Microsoft*, the DC Circuit went so far as to abandon the per se approach altogether. Similarly, in the European Union, the Commission's recent decision in *Microsoft* represents a clear departure from the strict per se approach to tying applied in *Hilti* and *Tetra Pak*.

If tying is not generally anticompetitive, common sense suggests that a per se rule is inappropriate because it results in an overly-broad prohibition that catches procompetitive practices in order to prohibit those few cases where tying is anticompetitive. In recent years, the so-called 'error-cost' analytical framework has been used to articulate this common-sense proposition in a more scientific, or at least scientific-sounding, way.[23] In essence, this framework looks at the relative costs of mistakes, called 'false positives' (false convictions) and 'false negatives' (false acquittals). Thus, a per se rule for price fixing is appropriate because price fixing is almost always harmful, so it is preferable to condemn those few cases of benign price fixing in order to prevent the more numerous cases of harmful price fixing from going unpunished. By the same token, a per se rule for tying would be inappropriate because tying is generally procompetitive, so a per se rule would condemn many cases of procompetitive or benign tying in order to ensure that the rare case of harmful tying does not slip through the net.

While few would dispute that a strict per se approach is inappropriate for tying cases, some might contend that the more flexible modified per se approach currently applied in the United States, and arguably by the European Commission in its *Microsoft* decision, is preferable to the rule of reason because it allows at least partial consideration of effects and efficiencies, yet avoids some of the administrative costs associated with a full-blown rule-of-reason analysis. In her concurring opinion in *Jefferson Parish*, Justice O'Connor found that even such a modified per se approach was flawed: 'tying doctrine incurs the costs of the rule-of-reason approach without achieving its benefits: the doctrine calls for the extensive and time-consuming economic analysis characteristic of the rule of reason, but then may be interpreted to prohibit arrangements that economic analysis would show to be beneficial'.[24]

Although the modified per se test applied in tying cases may entail many of the costs associated with the rule of reason, Justice O'Connor's suggestion that it does not achieve any of the benefits would not seem to be entirely accurate. To the extent that it allows the courts to consider some of the possible justifications for the tying, such as the efficiencies for which the two-products test serves as a proxy, the modified per se test achieves at least some of the benefits of the rule of reason. Even if Justice O'Connor may have overstated the case, however, it is true that a modified per se test does not achieve all of the benefits of the rule of reason because there are some efficiencies that are not captured under a per se test, such as those identified by the DC Circuit in *Microsoft*. Perhaps even more importantly, a modified per se test does not allow for an evaluation of the effects of the tying practice on the market. Moreover, any form of per se test has the drawback that it entails different standards of proof and allocations of burdens of proof than a rule of reason, which may impede as robust an examination of efficiencies as would be possible under the rule of reason.

If the main difference between a modified per se test and a rule of reason is that the former has fewer administrative costs, but does not allow for a thorough consideration of efficiencies, the question then becomes whether it is worth the extra time and expense to go through a full-blown rule-of-reason analysis in order to minimize the risk that certain efficiencies are overlooked. One approach to this issue indicated by the DC Circuit in *Microsoft* would be to try to identify circumstances in which tying would be particularly likely to generate efficiencies that would not be captured by a per se test (in that case, tying involving platform software) and apply the rule of reason in those cases. The drawback to this approach is that it is difficult to identify in advance all of the possible circumstances in which tying would be likely to generate procompetitive effects. Another approach would be to apply the rule of reason in every case on the grounds that the extra administrative cost is a small price to pay when compared with the cost of erroneously prohibiting procompetitive tying arrangements. A compromise that is discussed in the next section would be to use a 'structured' or 'modified' rule of reason that would avoid some administrative costs, yet allow for a thorough consideration of market effects and efficiencies in those cases where such an exercise is most likely to be warranted.

If a rule-of-reason test is appropriate, which one?

If a rule-of-reason test is deemed to be preferable to a per se test, the question becomes whether the rule-of-reason test should be a classic rule-of-reason test or a more structured rule-of-reason test. Under the classic test, the procompetitive benefits generated by the tying practice are weighed

against the anticompetitive harms. Under a structured rule of reason, this balancing of interests only occurs if the practice meets certain screening conditions.

While a textbook rule of reason has a certain theoretical appeal, it has serious drawbacks in practice. The kind of economic analysis called for under a pure rule of reason has been likened to a 'snipe hunt' where economists, lawyers and judges embark on a futile quest for mythical creatures found only in the universe of economic theory. A prominent US judge, Frank Easterbrook, warned:

> A court could try to conduct a full inquiry into the economic costs and benefits of a particular business practice . . . [b]ut it is fantastic to suppose that judges and juries could make such an evaluation. The welfare implications of most forms of business conduct are beyond our ken. If we assembled twelve economists and gave them all the available data about a business practice, plus an unlimited computer budget, we would not get agreement about whether the practice promoted consumers' welfare or economic efficiency more broadly defined. . . . A global inquiry invites no answer; it puts too many things in issue. To get an answer to a practical problem, we must start with some assumptions and fixed points of reference.[25]

This concern over the ability of economists to arrive at an answer and of courts to understand that answer in cases that raise complex economic issues is clearly relevant to the choice of the most appropriate standard by which to judge tying practices under Article 82. With the decentralization of the power to enforce the EU competition rules that occurred with the entry into force of Regulation 1/2003 in May 2004, litigation involving Article 82 is likely to arise with increasing frequency at the national level, often in front of courts with limited experience in dealing with the kinds of difficult economic issues raised in these cases. The adoption of a rule of reason that calls for weighing complex economic evidence not only could be difficult to apply in practice, but could result in sharp divergences in the case law at the national level. Apart from the difficulty of applying a rule of reason in the context of complex litigation, it creates uncertainty for companies and their advisors, who are unlikely to stop and analyze each tying practice under a full-blown rule-of-reason analysis.

These same kinds of arguments were raised in the context of the European Commission's 'modernization' of the EU competition rules applicable to restrictive agreements pursuant to which it replaced a legalistic, rule-based approach with one grounded in modern economic theory. While the Commission gave relatively short shrift to these arguments in the debate surrounding the modernization programme, it alleviated many of the concerns by creating a series of signposts to guide companies and their

advisors in the form of market-share screens, safe harbours and lists of prohibited 'hardcore' restrictions, all of which were spelled out in detail in a series of block exemption regulations and guidelines. These signposts enable companies to do a 'quick look' analysis of the relevant practices so that only those that clearly raise competition concerns are subject to a more detailed rule of reason-like assessment.

Out of similar concern for greater legal certainty and the need for practical guidance, it would be useful if any guidelines on Article 82 incorporated comparable signposts in the form of market share screens, presumptions and the like. The purpose of these screening conditions would be to eliminate cases where the risk of anticompetitive harm is sufficiently small that it is not worth carrying out a more in-depth inquiry. The following section considers possible conditions that could be applied in tying cases.

Possible conditions

What order?

In tying cases, screening conditions are either linked to the very definition of tying – i.e. the need for two distinct products and the presence of coercion – or they serve to filter out tying cases that do not raise competition concerns under Article 82 because of lack of a dominant position on the tying product's market or foreclosure effects on the tied product's market. The screening conditions should not need to be applied in any particular order. If any one of them is not met, the result should be no abuse under Article 82. Therefore, a court should be able to address the issue that seems easiest in a given case. If a case is not screened out, then the inquiry turns to whether there are objective justifications for the practice or procompetitive efficiencies that outweigh any anticompetitive harm caused by the tying practice.

Two products

In determining which tying cases merit a thorough inquiry, perhaps the most obvious condition that must be met is the existence of two products because, unless there are separate products, tying is not possible. Over time, it has become clear that the two-products test also serves as a useful proxy for many of the efficiencies that can be generated by a tying arrangement. If consumers do not buy the products separately, this suggests that the benefits of the integrated product such as lower transactional costs or better technological integration outweigh any negative consequences such as reduced consumer choice. The two-products test is valuable as a screen because it is generally easier to determine whether separate products are involved than it is to prove the existence of the efficiencies for which the test

serves as a proxy. In other words, the two-products inquiry makes it possible to avoid the often difficult task of proving the underlying efficiencies.

The key challenge is formulating a workable two-products test. It is tempting to approach the separate products issue intuitively, which means that the inquiry can take on a metaphysical character. Courts using this I-know-separate-products-when-I-see-them approach may reach the same result as those using a more analytical approach grounded in economic analysis, but it is unsatisfactory in terms of achieving predictable and consistent results. In the United States, the courts have moved away from a largely intuitive approach that focuses on the functional relationship between the products to a more analytical approach that focuses on the character of consumer demand for the products. In *Jefferson Parish*, which perhaps contains the most extensive discussion of the two-products requirement, the US Supreme Court made it clear that there must be a separate consumer demand for the tied product so that it would constitute a separate product market. In that case, the Court found that hospital services and anaesthesiological services were distinct markets because the available evidence showed that patients and doctors often requested anaesthesiological services separately from hospital services.

In the European Union, the development of an analytically-sound two-products test is not helped by the language of Article 82, which prohibits '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'. The use of the word 'nature' invites courts to focus on the functional relationship between the products rather than on more objective criteria such as whether competitors offer the products separately. Fortunately the European Commission and the European Courts have tended to focus more on the 'commercial usage' portion of the test. For example, in *Tetra Pak*, the defendant argued that machines and cartons formed one, integrated product – a packaging system. In finding that machines and cartons were separate products, the CFI focused on commercial usage as shown through evidence from the market rather than embarking on an examination of the functional relationship. More specifically the CFI found that machines and cartons were offered separately on the closely related market for non-aseptic packaging and, thus, should be considered to be separate products on the market for aseptic packaging.

If the evidence on commercial usage shows that the products are not offered separately so that there is only one product, the matter should end there because tying is only possible if there are two distinct products. While this point seems fairly obvious, there is language in the ECJ's judgment in

Tetra Pak that could be read as suggesting otherwise. More specifically, the ECJ stated:

> It must . . . be stressed that the list of abusive practices set out in the second paragraph of Article [82] of the Treaty is not exhaustive. Consequently, even where tied sales of two products are in accordance with commercial usage or there is a natural link between the two products in question, such sales may still constitute abuse within the meaning of Article [82] unless they are objectively justified.[26]

This language harbours potential for confusing the analysis because it could be read as saying that, even if commercial usage shows that the products are sold together so that there is only one product, a firm may be held in violation of Article 82. This interpretation would eviscerate the two-products requirement and, indeed, would not make sense because, by definition, tying requires two products.

The confusion stems from that fact that the 'commercial usage' portion of the Article 82 test may be used in two ways in a tying case: as part of the separate products test and, in cases where separate products are shown to exist, as a justification for the tying practice not being abusive. This is precisely what happened in *Tetra Pak*. Tetra Pak first pleaded commercial usage in the aseptic packaging market to show that packaging machines and cartons were one integrated system. When the CFI rejected this argument on the grounds that commercial usage in the neighbouring non-aseptic packaging market showed that machines and cartons were sold separately, Tetra Pak then pleaded commercial usage as justifying the practice; i.e. that, since most firms did not sell the products separately, there was no abuse. The passage from the ECJ's judgment quoted above was addressing this second argument. In essence, the ECJ seemed to be saying that, even if a dominant firm were able to show that most firms did not sell the products separately, this would not necessarily mean that the tying practice was not abusive.

If the Commission issues guidelines on Article 82, it would be helpful to clarify that commercial usage is decisive on the separate products issue, even if it is not on the question of objective justifications for the tying practice. If commercial usage shows that there is no separate demand for the products, the matter should end there because tying is only possible if there are two distinct products. In other words, the passage quoted above should not be interpreted as suggesting that a firm may be held in violation of Article 82 even if there is no evidence of separate demand for the products. Rather the *Tetra Pak* language should be interpreted as only being relevant in cases where it has been established that two products exist and the argument is raised that commercial usage justifies the tying practice. Any other interpretation would risk undermining an objective, market-based test for separate products.

While past commercial usage has the advantage of providing an objective means of determining whether products are separate that avoids the vagaries inherent in the more metaphysical inquiry into the nature of the relationship between the products, it is poorly suited to the situation where a company combines two products that were previously distinct. Indeed, in their drive to achieve ever greater technological convergence, companies in high-tech markets are constantly looking for ways to combine products that were previously distinct. As the two-products test is inherently backward-looking, it is a poor proxy for efficiencies generated by new and innovative integration of previously separate products.

Although such efficiencies should be taken into account in order not to place companies engaged in innovative integration at a disadvantage, the question is at what stage in the analysis such efficiencies should be evaluated. To allow companies to plead efficiencies in connection with the two-products test would seem to undermine the value of this test as a quick-look screen. It would seem more conducive to a full evaluation of these efficiencies for them to be brought into the analysis at a later stage when efficiencies are pleaded.[27]

A final issue that the European Commission will need to consider in formulating a workable two-products test is whether the inquiry should be limited to whether separate consumer demand exists for the tied product or whether the same question should be asked with respect to the tying product. In *Microsoft*, the Commission found that separate products existed on the basis that there was separate consumer demand for media players. Microsoft argued, however, that the question should also have been whether there was a demand for operating systems without the media player, in other words, for the tying product without the tied product.

Market power

Another obvious condition is market power. If a firm does not have power in the market for the tying product, it will not be able to force the purchaser to buy the tied product.

The use of market power as a screen has several practical advantages. First, it would not require a departure from the EU's established jurisprudence because the threshold issue in any Article 82 case is whether the defendant has a dominant position. Second, the concept of dominance is already familiar to courts and competition authorities as well as companies and their advisors. Third, although the exercise of defining the relevant market for the purpose of measuring the defendant's market share can be very difficult in some cases, in many cases, it is relatively straightforward and, thus, can provide a ready means of screening out cases where there is little risk of anticompetitive harm.

Products are tied together

A third possible condition that, like the two-products test, relates to the very definition of tying, would require a showing that the two products are tied together, i.e. that, as a practical matter, the customer does not have a choice of acquiring the tied product without the tying product. The two cases in which proof of such a tied sale is easiest are the classic tying case where the seller makes the sale of the tying product conditional on the purchase of the tied product, and the case of 'pure' bundling where the seller only offers the two products together, so that it is not possible to purchase either separately.

Matters become much more complicated in the case of 'mixed' bundling where the tying product and the tied product are available separately, but the seller coerces the customer into buying them together. For example, the seller may offer a package discount for the two products together that, as a practical matter, would mean that the purchase of the package is the only viable economic option. Difficult questions may arise in assessing whether the seller's strategy constitutes illegal coercion, such as what price differential is enough to support a claim of coercion and to what extent cost savings may justify charging a lower price for the bundle. In the European Union, answers to these kinds of questions are even more difficult because the law on rebate and discount schemes is in a confused state. Clearly the assessment of such schemes generally and in the specific context of tying claims is an area where Commission guidelines on Article 82 could inject much-needed clarity into the law.

Another form of tying that is likely to arise with increasing frequency in this age of technological convergence is so-called 'technological' tying where there is a technical link between the tying product and the tied product so that the tying product is designed to only work with the tied product or is designed to work better with the tied product. As discussed below in connection with efficiencies, technological tying that involves the integration of new features into high-technology products is likely to generate procompetitive efficiencies and should be judged under a deferential standard that takes full account of these efficiencies.

Many cases involving technological tying may well morph into difficult compulsory licensing cases because the only effective remedy for the alleged tie is likely to be for the dominant firm to make its interface information available to competitors so that they can make compatible products. If the interface information is already available, the alleged tie is unlikely to be effective because competitors would be free to make compatible products and there would be no appreciable foreclosure on the market for the tied product. Of course, there is the murky middle ground where some interface information has been made available, but competitors claim that they need

more information to ensure that their products are not placed at a disadvantage. The EU *Microsoft* case involves just this issue: competitors on the workgroup server market claimed that they needed additional interface operation to allow their servers to work as well with the Microsoft operating system as Microsoft's own servers.

The compulsory disclosure of interface information raises a host of issues beyond the scope of this chapter and which are the subject of a heated debate in the context of the *Microsoft* appeal. For the purposes of this chapter, the key point is that, even though issues involving the disclosure of interface information may initially arise in the context of a tying allegation, the analytical framework developed for tying cases is ill-suited to deal with them; instead, they are more appropriately resolved on the basis of principles developed in the context of compulsory licensing cases.

Foreclosure

A fourth possible condition is that the tying practice must be shown to foreclose competition on the market for the tied product. It is the inclusion of this condition that transforms what would otherwise be some form of a per se test into a rule-of-reason test because it calls for an analysis of the economic effects of the tying practice on the tied market.

In establishing whether this condition is met, the key questions are how much foreclosure must be shown before the tying is considered significant enough to give rise to a competition concern and, relatedly, to what extent potential foreclosure must be taken into account. The answer to the first question of how much necessarily entails a degree of arbitrariness and is linked to the second question in the sense that, even if the degree of actual foreclosure is limited, if potential foreclosure is taken into account, this will affect the answer. Nevertheless, it would be helpful if the European Commission could provide some concrete guidance. At the very least, it would be helpful if there were a minimum safe harbour below which companies could be confident that foreclosure would not be considered to have a significant effect on competition.

While limiting the foreclosure inquiry to actual foreclosure would seem to be an unduly narrow approach, as plaintiffs should not have to wait until there is no more competition on the market before they can bring a successful tying claim, the difficulty is developing a workable test for potential foreclosure. *Microsoft* highlights the challenges in this regard as one of the most hotly-debated issues in that case concerned the Commission's analysis of potential foreclosure on the tied product's market. In its decision, the Commission found that Microsoft's tying of its Window Media Player to its operating system created an unacceptable risk of potential foreclosure of competition in the media player market. To reach this conclusion, the

Commission had to make a number of assumptions about the future and rely on a somewhat speculative chain of causation. It reasoned that, because Microsoft's operating system was ubiquitous, this gave Microsoft an advantage in promoting its media player, which would cause content providers to write programs only for Microsoft's Windows Media Player, which would cause the media player market to tip in Microsoft's favour.

Although a discussion of the merits of the Commission's approach in *Microsoft* is beyond the scope of this chapter, the case highlights the desirability of placing appropriate limits on what constitutes potential foreclosure because, otherwise, there is a danger that the inquiry will become too speculative and virtually impossible to apply in practice. In particular, it would be helpful if the Commission were able to provide guidance on the time period over which potential foreclosure should be measured as well as the applicable standard of proof, which is discussed below.

Objective justifications and efficiencies

If the conditions for tying are met, the defendant may then put forward objective justifications for its practice or show that the practice generates procompetitive efficiencies that outweigh any anticompetitive harm. Thus far, defendants in EU tying cases have not been very successful in pleading objective justifications and efficiencies.

The most oft-cited example of an objective justification is where tying is necessary for reasons of health or safety. For example, in *Hilti*, the defendant argued that the tying of cartridges and nails was justified on the grounds that it was necessary to ensure that nails of the requisite quality were used with its nail guns and it even produced expert studies showing that competitors' nails were of inferior quality. The CFI rejected this line of argument on the grounds that Hilti should have complained to the appropriate authorities rather than taking the matter into its own hands. Similarly, in *Tetra Pak*, the CFI rejected the defendant's argument that the tying of machines and cartons was necessary on grounds of public health. According to the CFI, if Tetra Pak was worried about the suitability of competitors' cartons for its machines, it should have disclosed the technical specifications that cartons needed to meet to be used on its machines.

These cases suggest that defendants will rarely be successful with health and safety arguments. It almost seems that the defendant would have to show that a consumer had been injured by a competitor's inferior product after the defendant had complained to the appropriate public authority. In the context of its current review of Article 82, the Commission might well consider whether placing such a heavy burden on defendants to prove that tying lowers health and safety risks is consistent with a general analytical

framework that recognizes that tying is not anticompetitive in most cases and, perhaps more importantly, whether this approach is in the best interest of consumers given the consequences if it has the effect of chilling efforts by manufacturers to make their products as safe as possible.

Efficiency arguments have not fared much better than health and safety arguments. In *Microsoft*, Microsoft argued that the integration of the Windows Media Player into the Windows operating system generated a number of procompetitive efficiencies such as lower transaction costs because consumers would not have to purchase the products separately. It also emphasized that tying produced benefits because software developers would not have to worry about writing code for the media player functionality, but could concentrate on developing new applications. The Commission rejected all of these arguments with little difficulty.

As discussed in the next section, at least part of the reason that defendants have met with so little success in justifying their tying practices is that the standard of proof and the allocation of the burden of proof work against them. As suggested below, procedural rules that place defendants at a disadvantage would seem to be at odds with the view that tying is generally benign. On the substantive side, the Commission may want to consider whether a more deferential standard for the assessment of objective justifications and efficiencies would not be more in keeping with an analysis of tying under a rule-of-reason framework.

In this regard, the kinds of efficiencies pleaded by Microsoft in the context of technological integration are at the heart of the current push towards technological convergence in the information technology and consumer electronics industries and would seem to merit more weight than they were given in the Commission's decision. These efficiencies should be judged under a deferential standard unless courts and competition authorities are prepared to start second-guessing manufacturers on product design and integration issues. In the United States, the courts have clearly applied a more deferential standard in cases involving technological tying for precisely this reason.[28]

In judging efficiencies in cases involving the integration of new features into products, the 'commercial usage' criterion of Article 82 may prove useful. As discussed above, this criterion may come into play both in determining whether there are distinct products and in evaluating possible justifications. Even if commercial usage shows that some firms offer the tied product separately so that there are separate products, if the integration of the tying and tied product is common practice in the industry, this constitutes strong evidence that the integration creates efficiencies because non-dominant firms would not have an incentive to do so otherwise.

Standard and burden of proof

Importance of appropriate procedural rules

In developing the optimal approach to tying under Article 82, one area of focus should be the correct allocation of the burden of proof and the appropriate standards of proof, both of which will play key roles in determining the actual impact of whatever substantive legal test is chosen. Unless sufficient attention is given to these procedural issues, any reform of the substantive approach to tying risks having only a limited effect in practice. The EU *Microsoft* case illustrates this risk: the European Commission announced that its decision heralded a movement away from a per se test to a rule of reason, yet the rules that it applied on the standard of proof and the burden of proof were weighted so heavily in its favour that its new rule-of-reason approach was arguably nothing but a per se approach by another name.

The procedural rules on the allocation of the burden of proof and the standard of proof should be tailored to the substantive approach to the practice at issue, which means that these rules may not necessarily be the same in all Article 82 cases. Thus, if tying is considered to be benign in most cases so that it is judged under a rule of reason, these procedural rules should reflect this presumption. As discussed below, the procedural rules currently applied in tying cases reflect the per se approach to tying in that they favour the Commission and need to be reshaped to better reflect the assumptions underlying a rule-of-reason approach.

Burden of proof

In considering the most appropriate rules on the burden of proof in an Article 82 tying case, the basic steps in a rule-of-reason analysis under US law provide a useful point of comparison. In *Microsoft*, the DC Circuit set forth the basic steps in a rule-of-reason analysis in the portion of its opinion dealing with the Section 2 monopolization claim against Microsoft, and noted that the steps under a Section 1 rule-of-reason analysis were similar.[29] The steps in the rule-of-reason balancing process are as follows:

1. the plaintiff must show that the seller's conduct had an anticompetitive effect;
2. if the plaintiff establishes a prima facie case, the seller must offer procompetitive justifications for his conduct;
3. if the seller establishes procompetitive justifications, the burden shifts back to the plaintiff to rebut the claim; and
4. if the plaintiff is unable to rebut the asserted justifications, it must show that the anticompetitive harm of the conduct outweighs the procompetitive benefit.

In the European Union, the plaintiff also has the burden of establishing the infringement. Article 2 of Regulation 1/2003[30] provides as follows:

> In any national or Community proceeding for the application of Articles 81 and 82 of the Treaty, the burden of proving an infringement of Article 81(1) or of Article 82 of the Treaty shall rest on the party or authority alleging the infringement. The undertaking or association of undertakings claiming the benefit of Article 81(3) of the Treaty shall bear the burden of proving that the conditions of that paragraph are fulfilled.

Regulation 1/2003 is unclear on the allocation of the burden of proof in establishing justifications and efficiencies in an Article 82 case. Although Article 2 explicitly places the burden of establishing procompetitive effects on the defendant in an Article 81 case, it does not specify who has the burden of proving justifications for the allegedly abusive conduct in an Article 82 case. The broad language of Recital 5 of Regulation 1/2003 suggests that this burden falls on the defendant in Article 82 as well as Article 81 cases: '[i]t should be for the undertaking or association of undertakings invoking the benefit of a defence against a finding of infringement to demonstrate to the required legal standard that the conditions for applying such defence are satisfied'. However Article 2's silence on the issue of who bears the burden of proof on efficiencies and objective justifications in an Article 82 case would seem to leave the Commission with some discretion in allocating the burden of proof on these issues.

So far the Commission has placed the burden of establishing objective justifications and efficiencies entirely on the defendant. In its *Microsoft* decision, the Commission made it clear that Microsoft bore the burden of proof on these points and that it had not discharged that burden, stating that 'Microsoft has not submitted adequate evidence to the effect that tying WMP is objectively justified by procompetitive effects which would outweigh the distortion of competition caused by it'.[31]

Thus, while the United States and European Union both place the initial burden on the plaintiff to establish the infringement in a rule-of-reason case, the two jurisdictions then appear to diverge, particularly on the question of who has the final burden of proving objective justifications and efficiencies. Under the US rule-of-reason test described above, once the defendant puts forward a plausible argument on objective justifications and efficiencies, the burden shifts back to the plaintiff to show either that these justifications are merely pretextual or that they are outweighed by the anticompetitive effects of the tying arrangement. In contrast, the EU's approach requires the defendant not only to establish the existence of efficiencies, but to show that they outweigh any anticompetitive harm.

Placing the burden on the defendant, at least in the first instance, to put forward objective justifications and efficiencies in an Article 82 case makes sense. Once the Commission has established a prima facie case under Article 82, the defendant should have the burden of explaining why its conduct is not abusive. Moreover the defendant will be in the best position to identify specific efficiencies generated by the tie and to produce evidence of those efficiencies.

Once the defendant has put forward credible evidence on efficiencies and objective justifications, however, it is questionable whether the defendant should bear the ultimate burden of proof of establishing that the efficiencies put forward outweigh any anticompetitive effects. First, who bears the burden of proof could be decisive in some cases because of the difficulty of proving efficiencies. If the basic premise is that tying is benign in the majority of cases, the burden of proof should be allocated in a way that gives the defendant the benefit of the doubt in close cases. This proposition would seem to be all the more true in cases involving technological tying because, as discussed above, there is a higher likelihood that these cases involve efficiencies and should be reviewed under a deferential standard. Second, the Commission is in a much better position than the defendant to weigh the evidence on procompetitive benefits and anticompetitive harms in these cases because it has access to much more evidence.

Standards of proof

On the question of the relevant standards of proof in tying cases, the European Commission's current approach also appears to favour the plaintiff which, again, seems to be inconsistent with the basic premise that, if anything, the procedural rules should favour the defendant in tying cases. As discussed, in establishing the existence of an infringement in its decision in *Microsoft*, the Commission relied on a chain of causation that, at the very least, was questionable in showing that there was a risk of foreclosure on the tied product market. At least to the extent that the issue concerns predicting the future effects of a tying practice such as potential market foreclosure, it is arguable that the Commission failed to meet the standard of proof required by the ECJ's recent judgment in the *Tetra Laval*.[32] In that case, which dealt with the standard of proof to be met by the Commission in merger cases, the ECJ emphasized that it was important for the Commission to put forward convincing evidence in merger cases because the Commission is trying to predict the situation on the relevant market after the merger. On this point, the ECJ stated:

> [a] prospective analysis of the kind necessary in merger control must be carried out with great care since it does not entail the examination of past

> events – for which often many items of evidence are available which make it possible to understand the causes – or of current events, but rather a prediction of events which are more or less likely to occur in future if a decision prohibiting the planned concentration or laying down the conditions for it is not adopted.[33]

The ECJ then explained that it was 'particularly important' for the Commission to put forward convincing evidence in cases involving conglomerate mergers, i.e. where the parties are on neighbouring markets and there is a concern that they will be able to leverage their power in one market to increase their power in another:

> The analysis of a 'conglomerate-type' concentration is a prospective analysis in which, first, the consideration of a lengthy period of time in the future and, secondly, the leveraging necessary to give rise to a significant impediment to effective competition mean that the chains of causation and effect are dimly discernible, uncertain and difficult to establish. That being so, the quality of evidence produced by the Commission in order to establish that it is necessary to adopt a decision declaring the concentration incompatible with the common market is particularly important, since that evidence must support the Commission's conclusion that, if such a decision were not adopted, the economic development envisaged by it would be plausible.[34]

While *Tetra Laval* only dealt with the standard of proof in merger cases, the ECJ's reasoning would seem applicable to any competition case in which the Commission is required to evaluate future economic effects. The ECJ's reasoning would seem particularly relevant to the determination of the standard of proof that the Commission must meet in establishing the requisite degree of foreclosure on the tied product's market in a tying case. Establishing foreclosure not only requires the Commission to predict what will happen in the future if the tying practice continues, but requires it to establish that the dominant firm has the ability to leverage its dominant position on the tying product's market to foreclose competition on the tied product's market. Thus, the Commission must address chains of causation that are very similar to those involved in a conglomerate merger case, which, in the words of the ECJ, are 'dimly discernable, uncertain and difficult to establish'.[35] Indeed, it could be argued that the standard of proof should be even higher in the context of an Article 82 case because of the almost penal character of the high fines that can be imposed.

The issue of the appropriate standard of proof also arises in connection with the standard that the defendant must meet in establishing the existence of efficiencies and objective justifications. In *Microsoft*, the Commission required Microsoft to meet a very high standard of proof. With regard to

the efficiencies flowing to independent software developers of having the Windows Media Player integrated into the Windows operating system, the Commission found that 'Microsoft has failed to supply evidence that tying of WMP is indispensable for the alleged pro-competitive effects to come into effect'.[36] Requiring the defendant not only to establish that the tying practice gives rise to procompetitive justifications, but to show also that it is indispensable for these procompetitive justifications to arise makes it virtually impossible for the defendant ever to win on the issue of efficiencies. Indeed, it is difficult to reconcile requiring the defendant to meet such a high standard of proof with any approach that purports to be a rule-of-reason approach.

The procedural rules on the allocation of the burden of proof and the standard of proof are notoriously vague. For example, until *Tetra Laval*, the European Courts typically would state that, in merger cases, the Commission was required to produce enough evidence so as to meet the 'requisite legal standard' without specifying what that standard was.[37] In the wake of *Tetra Laval*, the EU antitrust community has begun to pay more attention to the applicable procedural rules.[38] While the focus has largely been on merger cases, procedural issues merit attention in the context of Article 81 and 82 cases as well. It is to be hoped that the Commission will include procedural issues within the scope of its Article 82 review because, otherwise, any reform of the substantive rules may only have limited effect in practice.

Conclusion

Of the abusive practices under Article 82, tying is the poster child for the need for an approach freed from the straitjacket of a rigid legalistic approach and more in line with contemporary economic theory. While economists continue to debate various aspects of tying, a consensus seems to have emerged that, in most cases, tying is benign and should be judged under a rule-of-reason standard rather than a per se standard. Unfortunately, the prevailing substantive test for tying in the European Union is a strict per se rule that does not take into account either the effects of the tying practice on the market or all the efficiencies that it can generate. While the European Commission's recent decision in *Microsoft* suggests that the law may be moving towards a rule-of-reason approach, the procedural rules governing the allocation of the burden of proof and the standard of proof place defendants at such a disadvantage that, for all practical purposes, they may as well be operating under a per se approach.

In the context of its current review of its policy under Article 82, the question facing the European Commission is not so much whether to adopt

a rule-of-reason approach to tying cases. It has already shown a willingness to do so in *Microsoft* and, more generally, a rule-of-reason approach would be consistent with its general aim of having an effects-based policy. Rather the question is, what are the optimal contours of this rule of reason? As discussed in this chapter, a structured rule of reason that includes a number of screening conditions along the lines outlined by the Commission in *Microsoft* would seem to be the best approach. It minimizes the need for the kind of open-ended inquiry called for under the classic rule of reason, where procompetitive effects are weighed against anticompetitive harm. At the same time, it allows such an inquiry in appropriate cases. Most importantly, it provides more concrete, practical guidance to companies and their advisors, as well as to competition authorities and courts, than a pure rule-of-reason approach.

The issuance of guidelines on Article 82 would allow the Commission to flesh out the screening conditions to provide as much concrete guidance as possible, in much the way it has done in the context of developing the rules and guidelines for the various categories of restrictive agreements. There are a number of questions of degree where it would be helpful to have some concrete indication of where the cut-off point is likely to be. How much foreclosure on the tied product's market is required to give rise to competition concerns? What is the relevant time period for an inquiry into potential foreclosure? How much demand must there be for the products separately for them to be considered as separate products for tying purposes? While any attempt to address these kinds of questions in the abstract is necessarily somewhat arbitrary, it may be worth sacrificing some theoretical purity for greater certainty.

In parallel with its review of the substantive rules on tying, the Commission needs to re-evaluate the procedural rules. Instead of reflecting the underlying presumption that, in most cases, tying is benign, the current rules do just the opposite. While the Commission has some constraints on what it can do in the procedural area as it must adhere to the rules set forth in Regulation 1/2003 as well as in the case law, there is still scope for recalibrating the procedural rules so that they reflect the more deferential standard that tying cases deserve.

Finally the review of its policy under Article 82 offers the Commission the opportunity to move ahead of the United States in bringing the law on tying into line with contemporary economic theory. If it does so, it may also help create more favourable conditions in Europe for the increased integration of new features into information technology and consumer electronics products and broader convergence among these sectors, which is one of the key drivers for the success of high-tech companies.

Notes

1. Partner, Covington & Burling LLP, Brussels.
2. For an interesting debate on tying in the context of the EU *Microsoft* case, see Evans, D., J. Padilla and M. Polo (2002), 'Tying in platform software: reasons for a rule-of-reason standard in European competition law', **25**, *World Competition*, 509; Dolmans, M. and T. Graf (2004), 'Analysis of tying under Article 82 EC: the European Commission's Microsoft decision in perspective', **27**, *World Competition*, 225; Evans, D. and J. Padilla (2004), 'Tying under Article 82 EC and the Microsoft decision: a comment on Dolmans and Graf', **27**, *World Competition*, 503. For other examples of the growing literature on the EU case, see Ridyard, D. (2005), 'Tying and bundling – cause for complaint?', **6**, *European Competition Law Review*, 316; Kuhn, K-U., R. Stillman and C. Caffarra (2005), 'Economic theories of bundling and their policy implications in abuse cases: an assessment in light of the Microsoft case', *European Competition Journal*, 85; Art, J.-Y. and G. McCurdy (2004), 'The European Commission's media player remedy in its *Microsoft* decision: compulsory code removal despite the absence of tying or foreclosure', **11**, *European Competition Law Review*, 694; Furse, M. (2004), 'Article 82, Microsoft and bundling, or 'the half monti', *Competition Law*, 169.
3. An overview of the Article 82 review and links to the Discussion Paper and other documents are available at the following website: http://europa.eu/comm/competition/antitrust/others/article_82_review.html. For a series of papers discussing the application of Article 82 to a wide array of practices, see GCLC Research Papers on Article 82 EC, Global Competition Law Centre, College of Europe (2005) available at http://gclc.coleurop.be, and, in particular, Ahlborn, C., D. Bailey and H. Crossley (2005), 'An Antitrust Analysis of Tying: Position Paper', which discusses in some detail several of the themes of this chapter.
4. Report by the Economic Advisory Group for Competition Policy (2005), 'An economic approach to Article 82', online at http://europa.eu.int/comm/competition/publications/studies/eagcp_july_21_05.pdf.
5. For a more detailed summary of the evolution of economic thinking on tying, see Ahlborn, C., D. Evans and J. Padilla (2004), 'The antitrust economics of tying', **49**, *Antitrust Bulletin*, 287–341; Hylton, K. and M. Salinger (2001), 'Tying law and policy: a decision-theoretic approach', **69**, *Antitrust L. J.*, 469. For some recent articles on the economics of tying, see Tirole, J. (2005), 'The analysis of tying cases: a primer', **1**, *Comp. Policy Int'l*, 1; Carlton, D. and M. Waldman (2005), 'How economics can improve antitrust doctrine towards tie-in sales', **1**, *Comp. Policy Int'l*, 27; Nalebuff, B. (2005), 'Tied and true exclusion', **1**, *Comp. Policy Int'l*, 41; Evans, D. and M. Salinger (2005), 'Why do firms bundle and tie? Evidence from competitive markets and implications for tying law', **22**; *Yale Journal on Regulation*, 37; Kuhn, K.-U., R. Stillman and C. Caffarra (2005), 'Economic theories of bundling and their policy implications in abuse cases: an assessment in light of the Microsoft case', *European Competition Journal*, 85; Nalebuff, B. and D. Majerus (2003), 'Bundling, tying, and portfolio effects', DTI Economics Paper No. 1.
6. Debate continues over the relative frequency of beneficial and harmful ties and the implications of this for the appropriate legal standard. See Kuhn, K.-U., R. Stillman and C. Caffarra (2005), 'Economic theories of bundling and their policy implications in abuse cases: an assessment in light of the Microsoft case', *European Competition Journal*, 85; Hylton, K. and M. Salinger (2001), 'Tying law and policy: a decision-theoretic approach', **69**, *Antitrust L. J.*, 469; Grimes, W. (2002), 'The antitrust tying law schism: a critique of *Microsoft III* and a response to Hylton and Salinger', **70**, *Antitrust L. J.*, 199; Hylton, K. and M. Salinger (2002), 'Reply to Grimes: illusory distinctions and schisms in tying law', **70**, *Antitrust L. J.*, 231.
7. *Northern Pacific Ry. Co.* v. *United States*, 356 US 1, 5–6 (1958).
8. Ibid., at 7–8 ('The very existence of this host of tying arrangements is itself compelling evidence of the defendant's great power . . .').
9. Bork, R. (1978), *The Antitrust Paradox*, p. 365.

10. Areeda, P. and H. Hovenkamp (2004), *Fundamentals of Antitrust Law*, at pp. 17–75.
11. *Jefferson Parish Hospital Dist. No. 2* v. *Hyde*, 466 US 2 (1984).
12. *Jefferson Parish*, 466 US at 9.
13. The US Supreme Court may have an opportunity to revisit its approach to at least certain aspects of the approach to tying in *Independent Ink, Inc*. v. *Illinois Tool Works, Inc*., 396 F.3d 1342 (Fed. Cir. 2005), *cert. granted*, 125 S.Ct. 2937 (2005), which is pending before it.
14. *United States* v. *Microsoft Corp.*, 253 F.3d 34, 85 (DC Cir. 2001) (*en banc*).
15. Ibid., at 84–97.
16. See text accompanying note 18 below.
17. Case T-30/89, *Hilti* v. *Commission*, [1991] ECR II-1439, confirmed on appeal in Case C-53-92 P, *Hilti* v. *Commission*, [1994] ECR I-667.
18. Case T-83-91, *Tetra Pak* v. *Commission*, [1994] ECR II-755, confirmed on appeal in Case C-333/94 P, *Tetra Pak* v. *Commission*, [1996] ECR I-5951.
19. *Microsoft*, Commission Decision of 24 March 2004 available at the following website: http://europa.eu.int/comm./competition/antitrust/cases/decisions/37792/en.pdf.
20. European Commission (24 March 2004), *Microsoft – Questions and Answers on Commission Decision*, MEMO/04/70.
21. The US Supreme Court has held that a little as $60 800 is 'not insubstantial'. *United States* v. *Loew's Inc*., 371 US 38 (1962).
22. *Jefferson Parish*, 466 US at 33–4.
23. For a good discussion of the error-cost framework, see Hylton, K. and M. Salinger (2001), 'Tying law and policy: a decision-theoretic approach', **69**, *Antitrust L. J*., 469.
24. *Jefferson Parish*, 466 US at 34–5.
25. Easterbrook, Frank H. (1984), 'The limits of antitrust', **63**, *Texas L. Rev*., reprinted in **1**, *Competition Policy Int'l*, 179, at p. 188 (2005).
26. *Tetra Pak* at para. 37.
27. In its judgment in *Microsoft*, the DC Circuit recognized that efficiencies attributable to newly-integrated products were not captured by the two-products test, which is why it opted for a rule-of-reason test that would allow such efficiencies to be pleaded (p. 49).
28. For a good discussion of US and EU cases involving technological tying, see Heiner, D. (2005), 'Assessing tying claims in the context of software integration: a suggested framework for applying the rule-of-reason analysis', **72**, *Univ. of Chicago L. Rev*., 123.
29. Ibid., at 58–9.
30. Council of Ministers of the European Union, *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*, OJ (2003) L1/1.
31. *Microsoft*, para. 970.
32. Case C-12/03, *Commission* v. *Tetra Laval BV*, judgment of 15 February 2005 (not yet reported).
33. Ibid., para. 42.
34. Ibid., para. 44.
35. Ibid., para. 44.
36. *Microsoft*, para. 963.
37. See, e.g.,Case T-342/99, *Airtours plc* v. *Commission*, [2002] ECR II-2585 at para. 62.
38. See, e.g., Vesterdorf, B. (March 2005), 'Standard of proof in merger cases: reflections in the light of recent case law of the Community Courts', *European Competition Journal*, 3; Reeves, T. and N. Dodoo (2005), 'Standards of proof and standards of judicial review in EC merger law', *Fordham Corporate Law Institute*.

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