

# The role of the ‘as efficient competitor’ test after the CJEU judgement in Intel

## I. Introduction

The presumption of illegality of fidelity rebates has long been a controversial topic in Europe, and has been heavily criticised for being similar to a ‘*per se*’, form-based approach to Art 102 enforcement. The *Intel* case became the first testing ground whether a more effects based approach as envisioned in the Commission Guidance Paper on Art 102 would be supported by the courts. In particular, the As Efficient Competitor (AEC) test was the benchmark which the Commission applied in its decision. While the General Court (GC) judgement on *Intel* upheld the Commission decision it explicitly rejected the need for effects analysis - specifically the need for implementing the AEC test through the economic evidence of a price cost test. This judgement was seen by many as signalling the demise of the Guidance Paper and its effects based approach. It reignited an intense and controversial discussion between academics, practitioners and commentators on the relevance of an effects based approach in abuse of dominance cases.<sup>1</sup>

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<sup>1</sup> W Wils, ‘The Judgment of the EU General Court in Intel and the So-Called ‘More Economic Approach’ to Abuse of Dominance’ (2014) 37(4) World Competition 405; A Usai, ‘The Intel case: between Tomra Systems ASA, the Commission’s Guidance on Enforcement Priorities and the Alleged Infringement of Procedural Requirements - No Fat Left on the Bone’ (2014) 35(8) European Competition Law Review 387; B Batchelor and B Meyer, ‘The Question of Intel’ (2014) Competition Law Insight; Venit, ‘Case T-286/09 Intel v. Commission’; Rey and Venit; Ch Ahlborn and D Piccinin, ‘The Intel judgment and Consumer Welfare - a Response to Wouter Wils’ (2015) 1(1) Competition Law and Policy Debate 60; D Geradin, ‘Loyalty Rebates after Intel: Time for the European Court of Justice to Overrule Hoffmann-La Roche’ (2015) 11(3) Journal of Competition Law and Economics 579; L Kjølbye, J Padilla and R Snelders, ‘The Intel Controversy: an Introduction’ (2015) 1(1) Competition Law and Policy Debate 28; A Jones and B Sufrin, ‘The European Way - Reflections on the Intel judgment’ (2015) 1(1) Competition Law and Policy Debate 32; B Allan, ‘Loyalty and Fidelity Rebates: A Sense of déjà vu again’ (2015) 1(1) Competition Law and Policy Debate 50; M Dolmans and T Graf, ‘Dealing with Intel Intelligently Delineating the Scope and Limits of the Court’s Ruling’ (2015) 1(1) Competition Law and Policy Debate 76; D Neven, ‘A Structured Assessment of Rebates Contingent on Exclusivity’ (2015) 1(1) Competition Law and Policy Debate 86; Sher, ‘Keep Calm—Yes; Carry on—No! (n 204); PI Colomo, ‘Intel and Article 102 TFEU Case Law: Making Sense of a Perpetual Controversy’ LSE Law, Society and Economy Working Papers 29/2014 <[http://eprints.lse.ac.uk/60585/1/WPS2014-29\\_Colomo.pdf](http://eprints.lse.ac.uk/60585/1/WPS2014-29_Colomo.pdf)> accessed 19 January 2018; N Petit, ‘Intel, Leveraging Rebates and the Goals of Article 102 TFEU’ (2015) 11(1) European Competition Journal 26; L Peepkorn, ‘Conditional pricing: Why the General Court is Wrong in Intel and What the Court of Justice can do to Rebalance the Assessment of Rebates’ (2015) 1 Concurrences 43; B Batchelor and F Moerman, ‘A Practical Approach to Rebates’ (2016) 37(12) European Competition Law Review 479; D Ridyard, ‘Calibration and Consistency in Article 102: Effects-based Enforcement after the Intel and Post Danmark judgments’ (2016) 3 Concurrences 29; D Geradin, ‘The Opinion of AG Wahl in Intel: Bringing Coherence and Wisdom into the CJEU’s Pricing Abuses Case-Law’ (2016) Tilburg Law School Legal Studies Research Paper Series No. 18/2016; F Preetz, ‘Does the Notion of Legal Certainty Prohibit an Effects-Based Approach to Rebates?’ (2017)

The review of the CJEU, which sent the case back to the GC, has thrown this discussion again wide open. While it appears to support the claim that prior case law establishes a presumption that loyalty rebates are anticompetitive it insists that this presumption should be effectively rebuttable. In particular, the Commission would have to examine Intel's counter arguments concerning the anti-competitive effects of fidelity rebates in the specific case, in particular whether the loyalty rebates *could exclude an equally efficient competitor from the market*. In this sense the CJEU also confirmed that the AEC test is the relevant benchmark to assess the anticompetitive effects of loyalty rebates if a firm attempts to rebut the presumption in a specific case.

Although the AEC test is often seen as the embodiment of an effects based approach, it remains controversial as a standard even among economists. In particular, there are significant doubts whether conceptually it would capture all types of foreclosure that would be anticompetitive from an economic point of view. Furthermore, the CJEU judgement implicitly requires that there is some evidentiary standard on the type and quality of evidence that would be sufficient to rebut the presumption. However, the CJEU leaves this issue open. In particular, the decision does not specify whether or under what circumstances a price-cost test generates relevant evidence for demonstrating that an equally efficient competitor could not have been foreclosed from the market. Unfortunately, the distinction between the conceptual framework of the AEC test and the economic evidence generated from a price cost test is often confused in the literature. However, in our view such a distinction, which was not made by the GC, is essential to an evaluation of the future role of the AEC test and a more refined discussion on the economically relevant evidence for the assessment of anticompetitive effects in concrete cases.

In this paper we take as given that the CJEU decision maintains a presumption for anticompetitive effects of loyalty rebates, but that it has opened up a wide scope for effects based analysis as soon as the defendant provides supportive evidence that its conduct is not capable of restricting competition. The Commission is then required to evaluate all the circumstances in order to assess the possible existence of a strategy aiming to exclude an as efficient competitor, mentioning explicitly the extent of the

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38(3) European Competition Law Review 99; D Neven and others, 'Intel: Analysing the Advocate General's opinion' (2017) 1 Concurrences 16.

undertaking's dominant position on the relevant market, the coverage and the duration of the practice and the conditions and arrangements for granting the rebates.

However the CJEU did not clarify what is sufficient supportive evidence to rebut the presumption of anticompetitive effects and what exactly the Commission would then have to show to prohibit the conduct anyway. In particular the CJEU did not clarify whether a price-cost test is required or has any evidentiary role in such either in the rebuttal or the evaluation of all the circumstances by the Commission. It only clarified that if the defendant is able to provide evidence that its conduct is not capable of foreclosing competitors, it can rebut the presumption of illegality of its practice.

In this paper we first discuss the role the AEC test can or should have in the rebuttal of anticompetitive effects by the parties or the further consideration of all the circumstances by the Commission in evaluating fidelity rebates. Second we discuss the type and level of evidence that a dominant company would be required to provide in order to rebut the presumption that its conduct is capable of restricting competition.

Section II therefore explains the AEC test and contrasts it with other tests suggested in the legal and economic literature. Section III

## **II. Economically Efficient Rules, Legal Standards, and the relevant sources of evidence**

To discuss the role of the ACE test post-*Intel* it is necessary to first compare it to the different legal standards that have been proposed for the assessment of anti-competitive conduct. We will show that the design of such tests attempts to achieve an optimal trade-off between the goal of economic efficiency, the goal of deterring anticompetitive behaviour, and of administrative implementability. Our discussion will then allow us to place the concept of the AEC test into context as a rule that is relatively cautious on competition policy intervention, but can be seen as the appropriate rule for the assessing arguments rebutting a presumption of anticompetitive effects.

Economically, fidelity rebates belong to a wide range of conditional pricing practices (including exclusive dealing, tying and bundling, minimum quantity

requirements, minimum market share requirements etc.) that only raise anticompetitive concerns if they induce either the permanent exit of competitors and/or permanently prevent entry.<sup>2</sup> “Exit” does not necessarily mean a complete departure of the firm from the industry, but a *permanent* reduction of a competitor’s ability to compete that causally results from the behaviour. Such permanent exclusion of competitors from the market with the result of *persistently* increased prices is called “anticompetitive foreclosure” and is the only outcome that is of concern from an economic perspective.

Even though it is economically relatively simple to describe how to characterize anticompetitive outcomes, it is, however, much harder to turn these definitions into decision rules that are useful for policy enforcement. The reason is that for all the different contractual terms mentioned there is a fundamental problem distinguishing between circumstances in which they are pro-competitive and in which they are anticompetitive.<sup>3</sup> The economic literature has shown that all of these practices have a tendency to increase competition and lower the price level unless they lead to foreclosure in the sense defined above. But even where there is foreclosure in the sense of pushing firms out of the market this has been shown in several studies not to harm consumers, i.e. prices are not increased considerably or and there is no significant effect on the value of available varieties.<sup>4</sup> For this reason the economic literature has long questioned presumptions against conditional pricing practices. There is a concern that even with dominant firms a blanket prohibition could prevent pro-competitive responses to entry and eliminate potential efficiency improvements leading to higher prices for consumers. Competition policy intervention would then be counterproductive.

There has therefore been a growing concern over decades about how to distinguish between pro-competitive and anti-competitive conduct in concrete cases. While it is economically tempting to suggest to perform a pure case by case analysis in order to minimize both errors of false positives and false negatives (referred to as type

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<sup>2</sup> See B. Genchev and J. Mortimer (2016), “Empirical Evidence on Conditional Pricing Practices”, NBER working paper 22313, for the relationship between these practices and an overview of the empirical performance of such contracts.

<sup>3</sup> For example, both all unit discounts and percentage discounts can have pro-competitive efficiency enhancing effects. See Daniel P. O’Brien, All-units Discounts and Double Moral Hazard (2013), [papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2228746](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2228746) and David E. Mills, Inducing Downstream Selling Effort with Market Share Discounts, 17 INT. J. ECON. BUS. 129

<sup>4</sup> See B. Genchev and J. Mortimer (2016), *supra*.

1 and type 2 errors), such an approach would be neither economically optimal nor practical for the implementation of competition rules. First, the main benefit of competition rules is in the deterrence of anticompetitive behaviour. If anticompetitive behaviour occurs, the market distortion has already occurred and a fine (and even compensation) will not eliminate the distortion.

But this means that an economically optimal enforcement rule should ideally give the correct incentives to engage in loyalty rebates and other conditional pricing behaviours if and only if they do not lead to anticompetitive foreclosure. For this goal it is necessary that a dominant firm knows which actions are problematic and which are not. This means that the data that is necessary to assess the legality of an action must be observable to a firm so that it can comply with the competition rule. This is essentially the *economically meaningful content* of the legal principles of predictability and legal certainty. It is not primarily the risk involved in ambiguous rules that matters from an economic point of view but the inability of ambiguous decision rules to generate strong incentives for efficient compliance.

A second feature of an optimal legal rule is that it has to take into account that the rule is enforceable by a competition authority, i.e. that evidence to support a decision in either direction can be obtained in a reasonable period of time. For this reason evidentiary standards and the allocation of the burden of proof matter. It is our view that optimal rules are therefore subject to a fundamental economic tradeoff between economic efficiency concerns and concerns about procedural efficiency, predictability, and legal certainty.

The law and economics literature has therefore searched broadly for an optimal standard that balances these costs. There are a number of approaches that have been developed and continue to cause controversy between economists because they trade off different costs to society differently.<sup>5</sup>

Traditional approaches in European competition law (especially in the ordoliberal tradition) have given very heavy weight to legal certainty and administrative

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<sup>5</sup> An overview of the main tests can be found in J Vickers, 'Abuse of Market Power' (2005) 115 *The Economic Journal* F 244; R O'Donoghue and J Padilla, *The law and economics of Article 102 TFEU* (2th edn, Hart Publishing 2013); OECD Report, 'Competition on the Merits' DAF/COMP(2005)27.

simplicity. This led to quasi per se prohibitions of bundling, exclusive dealing, and loyalty rebates by dominant firms. Since such a form based approach makes a well-specified set of conditional pricing behaviours illegal, it will certainly minimize the cost of legal uncertainty and administrative burden. Regulators and courts then have a vested interest in perpetuating such quasi per-se rules: They make their life simple. However, economists have pointed out the heavy social costs of such rules due to the allocative inefficiencies they cause, i.e. the distortions to normal competitive outcomes induced by competition policy itself. Quasi per-se rules minimize the evidence needed, but they maximizes type 2 errors and thus can have heavy economic costs.

Slight modifications of a pure form based approach maintain a system of low administrative costs, but typically do not very much to reduce economic distortions. But they often decrease the predictability of the outcomes. For example, the “naked abuse test” looks at whether the conduct could eliminate competition with a certain degree of probability without engaging in an analysis of the possible effect. Under the naked abuse test, a conduct should be condemned as anti-competitive if it has the purpose to impair the competitive process, the conduct does not *prima facie* create efficiencies, and is capable of causing consumer harm.<sup>6</sup> The problem with such a test is that experience as shown that efficiencies and their order of magnitude are typically not obvious to an outsider to the industry. Since conditional pricing behaviours can be efficient, but in principle can also be anticompetitive and cause consumer harm, firms will either perceive competition authorities to de facto always prohibit the practice or there will be considerable uncertainty as to the what a competition authority would accept as “prima facie” evidence for efficiencies that would trigger a more in depth investigation.

It should be noted that US ‘quick look’ approaches, where a conduct may be considered as anti-competitive without applying a full rule of reason analysis<sup>7</sup>, are very similar to the naked abuse test in working with a presumption of anticompetitive effects and some criterion why efficiencies appear unlikely. For example, a quick look

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<sup>6</sup> S Creighton and others, ‘Cheap Exclusion’ (2005) 72(3) Antitrust Law Journal 975, 987-89 (This could be an opportunistic behaviour in a private standard-setting process where the dominant company adopts a standard to confer its market power)

<sup>7</sup> M Stucke, ‘Does the Rule of Reason Violate the Rule of Law?’(2009) 42 University of California Davis Law Review 1375; H Hovenkamp, ‘The Rule of Reason’ (2017) <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2885916](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2885916)> accessed 15 January 2018.

approach has been proposed for reverse payment settlements when the reverse payment clearly exceeds a reasonable expectation of litigation costs of the patent holder. In this case such an approach can be justified based on the observation that efficiency arguments mostly justify reverse payments through the efficiency benefits of settlements. However, these efficiency arguments cannot justify settlement payments that exceed the litigation costs. In such situations a quick look test makes sense from both the economic and the legal certainty perspective.

A ‘quick look’ test has also been considered appropriate by some authors in the legal literature for conditional pricing practices.<sup>8</sup> However, it is much more difficult to find a reasonable benchmark that indicates low efficiency effects of such practices given that the sources of efficiencies are much more varied.

Whether in form of the naked abuse test or a quick look approach, these tests also leave open the standard that should be pursued if there is a reasonable efficiency argument available. While these approaches might increase the efficiency of dealing with some well-defined standard cases, they are clearly not useful as a general legal standard for conditional pricing practices or loyalty pricing scheme specifically.

In fact, the CJEU decision on Intel has clearly stated that the basic question to assess in cases of loyalty rebates (and presumably in conditional pricing cases generally) is whether an equally efficient competitor is excluded from the market. This is in fact nothing else but the AEC test. The CJEU thus seems to accept this test as the conceptual framework for the analysis, but constructs a framework of presumptions and allocation of burden of proof to implement it. Here we first discuss why the AEC test is an attractive test from the point of view of adopting an effects based approach that maintains relatively high legal certainty for the firms. We also explain why the AEC test is criticized by many economists.

The rationale behind the AEC test is that competition policy should not protect inefficient competitors. In this sense the AEC test encapsulates the idea that competition policy should protect competition and not competitors. There is also a compelling economic reason not to protect inefficient competitors: we know from the

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<sup>8</sup> J Lave, ‘The Law and Economics of de facto Exclusive Dealing’ (2005) 50(1) The Antitrust Bulletin 143.

productivity literature that the vast majority of productivity improvements come from the entry and exit process. Inefficient firms leave the market and new firms enter. If inefficient firms are protected they this tends to slow down the entry of more efficient competitors and thus undermines competition in the long run. In this sense, a policy that leads to reduced short run competition may be better in providing a long run competitive environment.

The AEC test also maintains a relatively high degree of predictability of competition policy intervention for a firm. For example, if efficiency can be fully assessed based on the cost structure of the firm, the dominant firm only needs information about its own cost structure to determine whether it could itself be profitable if a competitor were to apply the same pricing policy it wants to adopt. Compliance is therefore possible without making conjectures about what a competitor is likely to do and how the competition authority will be assessing the likelihood of exit by a competing firm. Information about the actual cost structure of rivals, their ability to survive in the market etc. are all pieces of information that are not readily available for a firm and so legal tests that would rely on such information would lead to less predictability and more uncertainty as to the assessment of any contemplated discounting policy.

At the same time as achieving a relatively high predictability of competition policy intervention, the AEC test also minimizes type two errors. The exclusion of an equally or more efficient competitor will generally harm effective competition and allow the dominant company to exercise its market power to the detriment of consumers.

The AEC test is therefore often defended on the basis that allowing less efficient rivals to be excluded simply leads to competition 'on the merits'. However, many economists and lawyers have argued that there will be a significant set of circumstances where the exclusion of less efficient rivals leads to persistent market power, so that consumers could be better off if some less efficient rivals would be protected. Thus the AEC test allows significant type one errors. This can be the case when significant economies of scale and/or scope make it virtually impossible to achieve the same cost efficiency as the dominant firm that uses the potentially anticompetitive conditional pricing practices. In this case it would be known that no competitor could ever be as

efficient as the dominant firm, so that the entry and exit process could not lead to an at least equally efficient competitor emerging. Nevertheless, a somewhat less efficient competitor might survive in the absence of strategies to exclude this competitor from the market, leading to competitive constraints on prices to the benefit of customers. This issue has been acknowledged in the Art. 102 Guidance Paper and deviations from a strict AEC test are therefore envisioned in the existing Guidance.

Another criticism of the AEC test that has been put forward by economists is that in some circumstances it may not even be clear, what it means to be an equally efficient competitor. Consider, for example a two sided market. The implicit cost of attracting a customer on one side of the market may be partially determined by the benefits to customers on the other side of the market of having that customer on the platform. In particular, if two companies compete using different monetization models, it is not necessarily clear on the basis of production costs alone, what exactly an equally efficient competitor is. If that is the case, the test leads to little guidance and its advantages for predictability and legal certainty disappear. It is for these two reasons, namely the bias towards type one errors and the potential problems with defining what “an as efficient competitor” is, that alternative tests have been proposed.

These proposed tests generally rely on some observation that the dominant firm fails to maximize short run profits. They then require that there is a causal linkage between this failure to maximize profits and the expectation that the conduct leads to foreclosure. The so-called profit-sacrifice test, considers whether the dominant company is engaged in a conduct that sacrifices short-run profits in order to eliminate rival firms and to exercise its market power in the long-run by raising prices.<sup>9</sup> It should be noted that evidence of intent becomes important in order to interpret the reason for the profit sacrifice.<sup>10</sup>

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<sup>9</sup> In fact, the test was first advocated in predatory pricing cases where the profit sacrifice was due to pricing below a dominant company’s costs (an appropriate measure of cost) in which case the dominant company cannot cover its costs and loses money. See P Areeda and D Turner, ‘Predatory Pricing and Related Practices Under Section 2 of the Sherman Act’ (1975) 88 Harvard Law Review 697; See also J Ordover and R Willig, ‘An Economic Definition of Predation: Pricing and Product Innovation’ 1981 91(1) The Yale Law Journal 8; W Baumol ‘Predation and the Logic of the Average Variable Cost Test’ (1996) 39(1) Journal of Law and Economics 49.

<sup>10</sup> P Bolton, J Brodley and M Riordan, ‘Predatory Pricing: Strategic Theory and Legal Policy’ (1999) 88 Geo Law Journal 2239, 2252. AKZO, para 7; See also Tetra Pak II, para, 41; Wanadoo Interactive (Case COMP/38.233) Commission Decision [2003] para 256.

The no economic sense test is more restrictive in requiring that it is also plausible that an anticompetitive effect could have come about. Under the no economic sense test ‘the conduct is exclusionary only if it would not make business or economic sense apart from its tendency to reduce or eliminate competition.’<sup>11</sup> This means more is needed than evidence on subjective intent. An anti-competitive conduct depends not only on whether the dominant company sacrifices profit in the short run, ‘but rather on the nature of the conduct ...and its likelihood of harming competition.’<sup>12</sup> Under the test, the conduct of a dominant company is exclusionary only if the company gains additional economic benefit because it eliminates competition and is able to exploit its market power to the detriment of consumers.<sup>13</sup>

While these cases remedy the weaknesses in the AEC test both in terms of its conceptual problems in reducing type one error and in situations where equal efficiency may be difficult to define, they greatly reduce the predictability of competition policy intervention and thus increase legal uncertainty. It will be hard for a company to assess whether it’s (possibly aggressive) competitive response to a rival will be assessed as a failure to maximize profit with the aim of excluding competitors by a competition authority or not. Some versions of the profit sacrifice test in the predatory pricing context try to reduce such uncertainty and suggest intervention only in a situation of ‘extreme sacrifice’, where the dominant company not only sacrifices profits but incurs losses in order to induce exit.<sup>14</sup> But an AEC test would equally be violated with pricing below cost, so that the profit sacrifice test has no advantage in such circumstances.

In practice, going beyond the AEC test will therefore involve a case by case detailed analysis, showing that the particular behaviour can only be explained by a strategy to foreclose which will involve evidence that foreclosure of the competitor would be necessary for the strategy to be profitable *and* complementary evidence on intent. Without such evidence it is simply not possible to ensure to a high enough degree of likelihood that foreclosure of a less efficient competitor is the result of an

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<sup>11</sup> Brief for the United States and the FTC as Amici Curiae Supporting Petitioner in Verizon Communications Inc. v. Law Offices of Curtis V Trinko, S. Ct. Docket 02-682, 7.

<sup>12</sup> D Melamed, ‘Exclusive Dealing Agreements and Other Exclusionary Conduct - Are There Unifying Principles’ (2006) 73 Antitrust Law Journal 389, 391.

<sup>13</sup> Werden (n 11) 426.

<sup>14</sup> A Edlin, ‘Academic Testimony on Unilateral Conduct before the US Dept. of Justice and Federal Trade Commission Hearings’ (2007) 29.

anticompetitive strategy and the rule would have no impact on deterrence. Recall that the starting point for all legal tests is ultimately the effect of the firms behaviour on consumer welfare.<sup>15</sup> However, the main issue for a legal test is, how the assessment of consumer welfare in a specific case is traded off with the general benefits of giving incentives to firms to avoid anticompetitive behaviour and the general benefits of an efficient administrative process. For an optimal enforcement system it may not be essential to rely on a single test. Instead the analysis can be structured through the allocation of burden of proof around a set of questions that allow to approximate economic efficiency with a minimal cost to incentives and administrative costs.

The basic system envisaged by the CJEU for loyalty rebates can be interpreted as potentially **3. What evidence is necessary to implement the AEC test in fidelity rebate cases: The limited relevance of the price-cost test**

In the competition policy discussion the AEC test is often conflated with some form of a “price-cost” test. The AEC test provides a conceptual benchmark to assess whether behaviour should be judged as anticompetitive or not. A price-cost test, on the other hand, is only one possible piece of evidence to verify whether the behaviour in question can exclude an as efficient competitor or not. As we will show below the price-cost test will often not provide good evidence to detect the exclusion of as efficient competitors. There is often better evidence available in practice given the structure of presumption and rebuttal that the CJEU has set out.

Note that what we are setting out is not an ideal use of evidence from an economic point of view. The procedure of the CJEU and the AEC test completely ignore information that is generated from pro-competitive explanations of the behaviour. Such pro-competitive explanations typically have implications for market outcomes that provide additional evidence that can distinguish between pro-competitive and anticompetitive behaviour. An ideal economic test would therefore

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<sup>15</sup> The exclusive focus on consumer welfare is also called the “consumer welfare test”. See Salop (n 8) 330; See also M Lao, ‘Defining Exclusionary Conduct under Section 2: The Case for Non-universal Standards’ in B Hawk (ed) *International Antitrust Law & Policy: Fordham Competition Law* (Ch 19, Juris Publishing 2006). H Hovenkamp ‘The Antitrust Standard for Unlawful Exclusionary Conduct’ (n ,,,) 4. We believe that a pure consumer welfare test simply ignores the issues of predictability and administrative costs and is simply the most extreme form of putting all the weight on economic efficiency instead of also considering the incentive effects of the policy and the administrative costs.

require a competition authority to propose a concrete theory of how exclusion is achieved in the market and the firm to provide a concrete theory of the pro-competitive or competitively neutral explanation for the practice. The decision would then simply rely on a hypothesis test taking all evidence into account.

Such a procedure does not fit in the current framework of competition policy enforcement for two reasons. First it is often believed (incorrectly from an economic point of view) that one has to first establish the anticompetitive effect of a behaviour and then “balance” it against efficiencies. This is flawed thinking because in most cases the behaviour is either anticompetitive or innocent. The “balancing” logic thus systematically excludes information that would be necessary to judge the plausibility of anticompetitive effects in the first place. Second, the hypothesis testing approach would be very poor at achieving predictability and legal certainty. It does not provide a mechanism that economizes on how information is gathered in legal proceedings. However, we show below that there is some room for the framework envisioned by the Court to allow for alternative explanations of the conduct to play a role.

The testing procedure that the court has in mind, starts from market conditions that, if present, would generate a high enough likelihood of anticompetitive effects of the conditional pricing practice to justify a presumption of anticompetitive effects. The rebuttal thus has to provide evidence that the data would reject the possibility of foreclosure effects for a broad class of theoretical mechanisms by which foreclosure through conditional pricing practices could arise. From this perspective the AEC test is meant to give a benchmark by which that evidence can be evaluated: if the action cannot exclude an equally efficient competitor it cannot have a foreclosure effect under any specific theory of harm.

These considerations give some guidance on good rebuttal evidence. All conditional pricing schemes from full exclusivity to discounts for reaching a certain share of purchases have the feature that they must achieve their foreclosure effect through locking in customers. The presumption that conditional pricing practices of a dominant company are anticompetitive, relies on the intuition that such a large part of the market is locked into contracts with the dominant firm, that the remaining customer pool is too small for the competitor to survive or to make sufficient investments to be competitive when new contract opportunities arise in the future. Note, however that

conditional pricing practices, like retroactive per unit rebates, have quite generally a lower degree of lock in than exclusive dealing contracts.

Compare for example an exclusive dealing contract with a fixed penalty of 10% of total expected revenue for breach of contract with a contract that has a retroactive rebate of 10% per unit purchased when 100% purchases of requirements are reached. Also assume that both have the same per unit price if 100% of requirements are actually purchased. On the surface it seems that both contracts have effectively the same terms. The effective price is the same and what is a rebate in one case is a contract breach penalty in the other. However, in the contract with retroactive rebates the cost of switching to a competitor is very different. After having received 1% of purchases under the initial contract, switching costs are very low. A competitor can undercut the incumbent supplier by very little and offer a long term contract that makes the buyer better off. However, the switching cost increases until - at the very end of the contract period - it is as high as under the exclusive contract with a fixed contract penalty. In both contracts lock in increases with the proportion of total requirements already purchased from the incumbent, but the lock in effect is far lower at the beginning of the contract with the retroactive rebate. High lock in occurs close to the end of the contract, where it matters least in terms of competition because a new contract competition will occur soon. Hence, the retroactive rebates contract should be less likely to induce foreclosure than the equivalent exclusive dealing contract.

This difference plays no role in the assessment of the theories of harm because they typically assume that the de facto impact of the retroactive rebate is equivalent to that of an exclusive contract. Hence, the appropriate evidence for a rebuttal of any presumption of anticompetitive effects would be precisely the same as in a defence against a claim that exclusive dealing led to foreclosure. Such a defence usually relies on interpreting the demand quantities in the exclusive contract as not available to the market and then showing that the remaining market is large enough so that an equally efficient competitor can achieve minimum efficient scale. Such an analysis does not require a price cost test because the instrument of foreclosure is a quantity restriction and not a predatory pricing commitment that directly squeezes the margin of the competitor.

Secondly, the analysis of exclusive dealing also puts considerable emphasis on the duration of contracts, which is underemphasized in other conditional pricing practices. If the duration of contracts is short, then the effective lock in of customers over any longer period of time is low and it becomes unlikely that a competitor becomes excluded. For example, if all exclusive contracts are only a year long, the unavailability of a customer hardly matters for foreclosure because there is a possibility to win the customer in the next year. Similarly if there are retroactive discounts on the overall requirements for a single year, such a contract cannot have more of a foreclosure effect than a one year exclusive contract. Certainly what the relevant contract length should be, will depend on the life cycle of the products and on the time period over which innovation typically would need to be amortized.

This does not mean that price cost tests cannot be useful as evidence. But they primarily have a role to demonstrate that the likelihood of foreclosure lower than when one assumes that a full lock in occurs for the part of customer demand for which effective exclusivity is granted. To see this consider the extreme case of pure exclusive dealing. Even under such a contract a switch of supplier is possible. The incentives to switch will depend on the switching cost imposed by the penalty for breach of contract. This penalty forces the competitor to lower the contractual price sufficiently to compensate the customer for the switching costs that are induced through the breach of contract penalty. It must therefore be a valid defensive argument to show that an as efficient competitor could compete for the locked in part of the market, if he can make a margin on such a contract. This can be shown through a price-cost test on the total conditions of the contract.

In the same spirit, a price cost test could be used as additional evidence to show that even the “lock in” effect of retroactive rebates is sufficiently limited as not to generate an anticompetitive effect. Recall that the switching costs in such a market increase over time. At the beginning of the contract it is highly unlikely that an equally efficient competitor could be foreclosed. As in the case of exclusive dealing, a price cost test that assesses whether an as efficient competitor could offer a profitable long term contract including the price discount necessary for compensating the customer for the switching cost (due to compensating for the loss of discount of the initially purchased units) can be designed to assess the de facto lock in effect. It could, for example, be

possible, that for the first year of a two year contract with retroactive rebates an as efficient competitor could undercut the contract terms, but not for the second year. Then the de facto exclusivity period of the contract with retroactive rebates is only a single year. This finding would then have a significant impact on the assessment of the potential foreclosure effect of the contract overall. In that case the two year contract with retroactive rebates is equivalent to a one year exclusive contract and not a two year exclusive contract.

A price cost test may also have an additional role in some conditional rebate cases, for example when a retroactive discount is given when 80% of the requirements are bought from the potentially foreclosing supplier. Suppose for a moment that this contract de facto acts like an exclusive contract over 80% of requirements and that all customers are covered by such contracts. If competition for 20% requirements in the overall market would still allow an equally efficient competitor to achieve minimum efficient scale, these contracts would have no foreclosure effect. However, such a finding might be too optimistic because it does not take into account the initial pricing commitment by the incumbent supplier. Suppose the price per unit for everything exceeding 80% is set so low that an equally efficient competitor could effectively not win any part of the 20% “free” demand without incurring losses, then foreclosure would still occur. In this case the use of a price cost test on the incremental 20% free demand is still relevant to reject the presumption of foreclosure from the market. Essentially, in this case the pricing for units above the 80% threshold would be subject to a standard predatory pricing test.

A further element of the analysis that will be of importance for the credibility of a rebuttal for any conditional pricing case is the question of how much of the demand that is not locked in could potentially be won by the competitor. For example, if 20% of the overall demand can still be competed for, even an equally efficient competitor will not obtain all of the demand. The most likely proportion of the free demand that can be won by an equally efficient competitor would be expected to be 50%. This means that the assessment of whether foreclosure occurs cannot be based on winning 20% of the market but rather whether 10% of the market would be sufficient to reach minimum efficient scale. This proportion may be even lower in cases where there is a subset of consumers who cannot substitute between the incumbent and the competitor because

they are locked in to the incumbent product even in the absence of conditional pricing. For example, there are some customers who would only buy Intel products and never AMD because of their preferences. In such a case the prediction of likely sales for the competitor has to be adjusted to these demand effects.

This is sometimes discussed in the legal literature as the incumbent being an “unavoidable trading partner”. This term is economically unhelpful because the relevant question is how much of the customer demand would never switch or only switch with much large price discounts relative to the incumbent price. This is essentially a question of the degree of substitutability between the incumbent and the competitor, which should be addressed with evidence that specifically addresses this point instead of an ill-defined term like “unavoidable trading partner”. The literature has also made a related distinction between contestable and non-contestable demand. Again this refers to a situation in which some customers will not substitute between the product or only substitute at high levels of price compensation.

Such a question about substitutability is difficult to handle empirically because evidence for preferences of customers is often not available. How much of demand is contestable and not contestable is usually not a question that can be answered empirically with any precision, because we do not see the relevant substitution experiments in practice. The only available method to address such questions is to perform the analysis of potential exclusionary effects of conditional pricing contracts for a range of assumptions on the size of the non-contestable proportion of the market. The presumption of foreclosure of an equally efficient competitor should be considered rebutted if such a range cannot clearly exclude the conclusion that an as efficient competitor cannot be foreclosed.

Note that such a conservative standard for the rebuttal is a necessary condition for achieving a high degree of legal certainty. Essentially, whenever demand side considerations, i.e. substitutability, comes into the assessment, the predictability of effects under any evidentiary standard (including versions of the modified price-cost test that has been proposed for such circumstances), will lead to significant uncertainties. Such a conservative standard for the rebuttal does not mean that the case should then be dismissed. As we argued in section 2 there is room for overruling a rebuttal based on the AEC test, if there is much stronger evidence that the pricing policy

is primarily profitable if it generates profits only when exit occurs and there is actual evidence for intent. Note that again that this increase in the standard of proof when overriding a rebuttal increases predictability. It will be unlikely that evidence for intent is found when the motivation of the dominant firm in adopting the pricing practice was not to exclude the competitor from the market.

#### **4. Conclusion**

The aim of this paper was to review the potential role of the AEC test in conditional pricing cases from an economic perspective in light of the CJEU judgment on Intel. For this reason we reviewed the logic of the AEC test and why it is criticized in some of the economic and legal literatures. We show that the AEC test preserves much of the effects based approach while allowing for a relatively high degree of predictability. However, it tends to have a relatively large likelihood of type one errors that lead to anticompetitive conduct being tolerated. Any reduction in type one errors will, however, reduce predictability of decisions because pro- and anticompetitive effects of loyalty rebates are difficult to distinguish.

We show that the CJEU decision does allow the adoption of hybrid sequential test that allows a high degree of legal certainty while increasing economic efficiency. The CJEU maintains a presumption that under certain conditions conditional pricing practices (or at least loyalty discounts) are illegal, but insists on the possibility of rebuttal under the standard of an as efficient competitor test. However, this does not have to be the last word. If the presumption is rebutted, this means, however, that a higher standard of proof needs to be applied to overrule the rebuttal. We argue that this essentially comes down to an economic sense test in which intent will play an essential role as evidence.

Finally, we discuss the necessary evidence for showing that a dominant firm does not violate an as efficient competitor test. We show that price-cost tests are not necessarily essential for such a rebuttal, but that they can be helpful as evidence to show that the lock in effect of price clauses is sufficiently limited, that the conditional pricing practices would not prevent an as efficient competitor from competing for customers covered by such contracts.

