**The As-Efficient Competitor Test: A Cornerstone or a Controversy in EU Competition Law?**

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1. **Introduction**

The As-Efficient Competitor (AEC) test has long been a focal point in EU competition law, serving as a conceptual tool for assessing whether the conduct of a dominant company has exclusionary effects capable of harming competition. Its introduction in the European Commission's 2008 Guidance Paper marked a significant shift toward an effects-based approach, aiming to ensure that competition enforcement focused on conduct that genuinely harms consumers by impairing the competitive process. However, the AEC test has sparked significant debate among scholars, practitioners, and courts, particularly concerning its application and evidentiary role in assessing abuse under Article 102 TFEU. The purpose of this paper is to clarify the meaning and role of the AEC test in EU competition law and to examine why it has generated such significant controversy in its application and interpretation.

This paper focuses on clarifying the AEC test, starting with its theoretical foundation and the general idea of this conceptual framework. It traces the test’s adoption in the European Commission’s 2008 Guidance Paper, explaining how it was conceived as a conceptual principle for assessing anticompetitive foreclosure rather than being limited to a specific empirical procedure, such as a price-cost test. The conflation of the AEC principle with the price-cost test is addressed as a critical misunderstanding, highlighting that the AEC principle serves as a broader standard for evaluating exclusionary conduct. The paper also examines briefly the test’s interpretation and application by the European Courts, revealing its evolution and the recognition that while the AEC principle remains a valid benchmark, the evidentiary tools used to assess it may vary depending on the nature of the conduct. Finally, the paper briefly considers the future of the AEC test in light of the European Commission’s Draft Guidelines on the application of Article 102 TFEU, considering its potential implications for enforcement and competition law.

1. **Understanding the AEC test**

The origins of the AEC test can be traced back to the foundational principles of the Chicago School of thought. Scholars from this School argued that competition is harmed only when conduct excludes an equally or more efficient competitor. This idea is rooted in the belief that competition among efficient companies inherently drives greater efficiency and benefits consumer welfare. The rationale behind this perspective is that conduct excluding less efficient rivals represents effective competition, often described as competition "on the merits." In such scenarios, even if less efficient competitors are forced out of the market, competition remains effective. On the contrary, requiring a dominant firm to set its prices not at its marginal costs but at the level of a less efficient competitor's costs would artificially protect inefficiency and raise prices, distorting competition. As Richard Posner famously noted, "it would be absurd to require the firm to hold a price umbrella over less efficient entrants," highlighting the detrimental impact of such an approach. This dynamic, where antitrust enforcement could unintentionally undermine competitive markets, was aptly termed the "paradox of antitrust enforcement" by Robert Bork.

Richard Posner initially proposed the AEC test specifically for evaluating predatory pricing. He argued that conduct should be considered predatory if a dominant firm's pricing is below its short-run marginal cost, or "below long-run marginal cost with the intent to exclude a competitor." This proposal became the basis for what is now known as the "rule of reason" approach, which asserts that a business practice is not inherently illegal but can be justified if it does not harm consumers or if it creates efficiencies. Similarly, Areeda and Turner, in developing their standard for assessing predatory pricing, focused on pricing below average variable cost, reasoning that such pricing "has the effect of destroying an equally efficient rival." They argued that prices set above average variable cost should be presumed lawful because they reflect competition on the merits, which only excludes less efficient rivals.

Areeda and Turner further concluded that evidence of profit sacrifice could suffice to establish liability for predatory pricing, emphasizing that firms pricing above average variable cost are engaging in legitimate competition. This perspective assumes that equally or more efficient firms can compete effectively without requiring antitrust protections for less efficient competitors. Consequently, in such cases, antitrust law should not provide a "safe haven" for inefficient competitors shielded from price competition. This reasoning underpins the principles behind the AEC test (now called the AEC principle for that reason) and its emphasis on ensuring that enforcement focuses on genuinely anticompetitive practices without stifling legitimate competitive dynamics.

1. **The Introduction of the AEC Test in EU competition law**

The AEC principle was introduced with the 2008 Guidance Paper on Article 102 TFEU which marked a pivotal shift in EU competition policy, transitioning from a formalistic approach - focused on the form of conduct irrespective of its effects of the market - to an effects-based approach. This evolution was motivated by the recognition that certain practices, traditionally presumed illegal under the formalistic framework, often had efficiency-enhancing benefits. Rigid enforcement under the older paradigm risked deterring pro-competitive and innovative behaviour, particularly in cases of pricing strategies and loyalty rebates.

In the 2008 Guidance Paper, the Commission considered that anti-competitive foreclosure could be evaluated through a price-cost test as a specific instrument that would determine whether an as efficient competitor could survive or not. The Commission considered that price-based exclusion should be evaluated through comparing the actual costs and prices of a dominant company in order to assess whether the dominant company is sacrificing profits by its conduct. Thus, the presumption is that if a dominant company’s pricing is below an appropriate measure of cost, an as efficient competitor with the same cost structure would not be able to match its prices and, thus, to compete without incurring losses.

The Commission considered the price-cost test (requiring profit sacrifice as a key element of the abuse) as a specific instrument to verify whether an as efficient competitor will be foreclosed. To enhance clarity, we should differentiate the AEC Principle in the broader context described above from the “AEC test,” often associated with the application of price-cost tests as a practical method for evidencing anticompetitive foreclosure. The latter will be called the AEC price-cost test.

Within this broader context, the AEC price-cost test was introduced as a tool to evaluate whether a dominant firm's conduct could exclude a competitor that is as efficient in terms of costs. Its methodology involved comparing the dominant firm's prices and costs to assess whether the firm's behaviour would force an equally efficient rival to operate at a loss, thereby foreclosing competition. By focusing on efficiency and cost-structure, the test sought to identify conduct capable of harming competition, as opposed to merely disadvantaging less efficient competitors.

The Guidance Paper framed the AEC price-cost test as particularly relevant in the evaluation of predatory pricing and loyalty rebates. In cases of predatory pricing, the test helped determine whether a dominant firm was pricing below cost with the intent of excluding competitors and subsequently raising prices. For loyalty rebates, the AEC price-cost test assessed whether such schemes effectively forced customers to stay loyal to the dominant firm by making it unviable for rivals to compete.

However, there is significant difference between the simple price-cost test applicable to predation and the one applicable to fidelity rebates. We will call the latter a modified price-cost test. This is because in case of retroactive rebates applied by a dominant company with unavoidable trading partner status, the demand is divided into non-contestable and contestable shares, with competition occurring only in the latter. To address this, a modified price-cost test was proposed, focusing on whether the effective price for the contestable share, accounting for the loyalty discount, is below the cost of incremental units.

A simple hypothetical example can help in understanding the logic of this modified test. Assume that the dominant company’s list price is €10 per unit and a customer’s assured base of sales is 100 units, and the customer is willing to buy 30 units from a competitor. The dominant company might set a threshold for obtaining rebates above the level of customers’ assured base, i.e. at 130 units, and to offer a 10% rebate for all units, not only for the incremental purchases, once the threshold is reached. If a customer reaches the threshold, the price will be €9 for all units. This means that the total price paid by a customer before the rebates is 100 x 10=1000 and 130 x 9=1170 with rebates, which means that the last 30 units were sold for €170, which makes the price per unit €5.67 (for the incremental 30 units). This technically means that the effective price for the last 30 units will be discounted with 43.3%; which makes the discount for the incremental units much higher than the rebate percentage. Under this scenario, the price that the competitor has to offer for the incremental units to compensate the customer for the loss of rebates is €5,67. This price is below the cost (€ 6). With this strategy, it will be impossible for a competitor to compete with the dominant company for this part of demand because he cannot match the rebates of the dominant company without losses. On the other hand, the dominant supplier does not incur losses as far as it can recoup the rebate on its whole range of sales.

The rationale behind this argument is that if the attributed price is above the costs for the contestable part of sales, any as efficient as the discounter competitor will be able to compete for the contestable sales. However, despite its logic, critics question the test’s practicality due to significant implementation challenges. Accurately estimating the contestable share of sales is complex, costly, and unpredictable. While the economic logic is similar for single-product retroactive rebates and bundle rebates, the practical application differs significantly, with single-product rebates requiring precise attribution of discounts to the contestable demand for one product. Indeed, AEC test has introduced significant ambiguity in the case law developed after the reform of Article 102 which offers mixed interpretations - some decisions diverging from the idea that the AEC test is purely a price-cost test, suggesting instead that it represents a broader concept. The following section will examine this controversy.

1. **Judicial Interpretation of the AEC Test**

The Intel case became a cornerstone in the debate over the AEC test. The European Commission argued that exclusivity rebates offered by Intel to its customers were inherently anti-competitive, asserting that it was unnecessary to apply the AEC test to establish abuse. However, the Commission conducted the test "for completeness" and included its findings in its decision. The General Court (2014) upheld the Commission’s reasoning, dismissing the need for the AEC test in exclusivity rebate cases, as such rebates restrict market access through their exclusivity condition rather than pricing. The GC emphasized that a price-cost analysis was essential only for pricing abuses like predatory pricing or margin squeeze but not for rebates conditioned on exclusivity.

Chronologically, the next judgment that considered the application of the test was *Post Danmark II* (2015), where the CJEU held that while the AEC test may serve as a useful tool in specific circumstances, it is neither legally required nor decisive for establishing abuse. The Court emphasized that an effects-based analysis must take into account all relevant circumstances, focusing on the broader principle of anticompetitive foreclosure rather than rigid reliance on price-cost comparisons. This judgment illustrated a clear distinction between the AEC principle, which serves as the overarching benchmark for evaluating exclusionary effects, and the price-cost test, which is merely one evidentiary tool among others to assess whether this principle has been violated.

This approach was further addressed in the CJEU's *Intel* judgment (2017), where the Court remitted the case back to the GC, instructing it to consider Intel’s arguments about the AEC test since the Commission had made the test part of its decision. The CJEU ruled that where a dominant firm contests the validity of the Commission’s economic analysis, courts must rigorously review the methodology and evidence. This judgment underscored procedural safeguards but left unresolved the question of whether the AEC test was conceptually appropriate for assessing exclusivity rebates. In the Intel Renvoi (2022) judgment, the GC scrutinized the Commission’s application of the AEC test but continued to treat it as a price-cost tool applicable primarily to pricing abuses. The court’s reasoning blurred the distinction between price-based and non-price-based conduct, creating uncertainty about the role of the AEC test in exclusivity rebate cases.

However, in the SEN judgment (2023), the CJEU explicitly distinguished between the AEC principle, a broad conceptual framework for evaluating exclusionary conduct, and the price-cost test, a specific evidentiary tool relevant primarily to pricing practices. The Court reinforced the view that the AEC principle serves as the overarching standard for assessing exclusionary effects across all types of conduct, while the choice of evidentiary tools may vary depending on the nature of the behaviour under scrutiny.

Similarly, in *Unilever*, the CJEU reiterated that the purpose of Article 102 is to ensure that effective competition is not distorted, clarifying that a dominant undertaking is not prevented from competing on the merits. The CJEU acknowledged that not every exclusionary effect is necessarily detrimental to competition, as competition on the merits may naturally lead to the marginalization of less efficient competitors. The Court interpreted the AEC principle as encompassing various methods to assess whether a company’s behavior could exclude a hypothetical equally efficient competitor, thereby affirming its broader application to non-pricing practices, such as exclusive dealing.

In Google Android (2022), the GC stated that the Commission was required to assess whether the practice excludes competitors that are at least as efficient as the dominant undertaking using the AEC test. While the test can be useful, the GC clarified that it must be applied rigorously when employed. The CJEU’s latest judgment in Intel (2024) introduced additional ambiguity regarding the application of the effects-based approach. The Court suggested that the Commission is required to assess whether a dominant company’s strategy excludes equally efficient competitors only if the company provides evidence during the administrative procedure demonstrating that its conduct was not anti-competitive or lacked foreclosure effects. This suggests that the AEC test is only necessary if the dominant firm challenges the Commission’s assessment.

The *Intel II* (2024) judgment further confirmed that the price-cost test is a tool rather than a requirement within the broader AEC principle, which ensures an effects-based analysis. The CJEU’s approach supports the view that the AEC principle is distinct from, and not limited to, the price-cost test, allowing the Commission to flexibly apply an effects-based analysis across diverse contexts of abuse.

Judicial rulings have clarified that the AEC test, often perceived as synonymous with a price-cost analysis, is merely one tool within the broader AEC principle, which serves as the benchmark for assessing exclusionary conduct. While the test is relevant for pricing abuses like predatory pricing and margin squeeze, its utility in non-price-related conduct, such as exclusivity rebates, remains contested. Courts have emphasized the importance of a comprehensive effects-based analysis, considering all relevant circumstances, rather than over-reliance on price-cost metrics.

The judicial interpretation of the AEC test has evolved to recognize its role as part of a broader effects-based framework. However, confusion persists regarding its application to non-pricing practices. The analysis of case law underscores that the price-cost test should not be treated as a mandatory standard but as one of many tools for evaluating anticompetitive foreclosure. Moving forward, the European Commission could address these ambiguities by explicitly clarifying the circumstances under which the AEC price-cost test is appropriate in its revised Article 102 Guidelines, reaffirming its commitment to the AEC principle while ensuring flexibility in evidentiary approaches. By addressing these concerns, the European Commission can strike a balance between ensuring effective enforcement and preserving the procedural and substantive fairness emphasized by the Courts, thereby securing the continued relevance of the AEC principle as a guiding framework in EU competition law.

1. **Conclusion**

The analysis reveals that the AEC Principle remains a cornerstone of the effects-based approach in EU competition law, guiding the assessment of exclusionary practices to ensure that enforcement targets conduct harming competition and consumer welfare rather than merely disadvantaging less efficient competitors. While the European Courts have evolved to endorse the AEC Principle as a broad evaluation standard, they have clarified that the price-cost test is just one evidentiary tool, relevant in specific contexts, particularly pricing abuses. This paper concludes that the confusion between the AEC Principle as an evaluation framework and the price-cost test as evidence lies at the heart of the controversy over the application of the test. To address this, the Commission should reaffirm its commitment to the AEC Principle while clarifying the contexts in which specific evidentiary tools, such as the price-cost test, are appropriate. Doing so would strike a balance between ensuring effective competition enforcement and providing legal certainty, thereby preserving the AEC Principle as a guiding framework for assessing anticompetitive foreclosure.

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