The Intel Decision and the EU's New Standards for Behaviours by Dominant Firms

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Content

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Abstract

The Intel Decision is significantly flawed. First, the Commission did not take into serious account the dynamics of the relevant markets. The market power evaluation by the Commission was flawed because Intel was not able freely to exercise the market power. Second, the Commission's explanations for the theory of 'as efficient competitor test' do not help the public fully understand how the Commission performed this test. The myth of how the test was used would presumably create chilling effects on numerous companies in various European markets, particularly the dominant firms. Third, the Commission applied Guidance on enforcement priorities in applying Article 82 EC, in particular as efficient competitor test set out in the document, to the Intel case. The Commission applied the test as if the Guidance Paper was legally binding, which violated the principle of legal certainty. As regards the issues of naked restrictions, the Commission failed to present sufficient evidence to support that Intel paid the OEMs to restrict the commercialisation of planned AMD-based products. Also, the Commission failed to prove that the conduct of Intel had a material effect on the decision-making of OEMs in that they restricted the commercialisation of AMD-based computers.

Key Words: The Intel Decision
Significant intellectual property barriers
Abuse of dominant position
As efficient competitor test
Naked restrictions

歐盟競爭法處理濫用獨占地位爭議之新標準－以英特爾案爲中心

謝國廉*

摘要

歐洲聯盟執行委員會對英特爾案所作的行政處分存在明顯瑕疵。首先，執委會未能愼思此案中相關市場的實際狀況，所作的市場力量評估顯然有誤。誠如執委會所言，英特爾已取得的智慧財產權，對有意進入相關市場參與競爭的企業確係明顯的智慧財產權壁壘，但礙於下游電腦代工廠與英特爾的競爭對手的市場影響力，英特爾事實上無法毫無顧忌地利用其市場力量。其次，執委會對同等效能競爭者測試法之理論的說明，無法令公眾明瞭其實施此測試法的方式。此高度不明確性對成千上萬於歐洲市場運作的企業，特別是擁有獨占地位的企業，極可能造成寒蟬效應。第三，執委會於英特爾案的行政處分，適用了不具法律拘束力的「關於歐洲共同體條約第82條施行重點之指南」，特別是其中關於同等效能競爭者測試法的規定。執委會將此指南作爲法律加以適用，顯有違歐盟法的法律確定性原則。關於執委會所稱英特爾所採取的明顯限制行爲，執委會指出，英特爾以提供財務支援的方式，限制下游電腦代工廠按計畫製造與販賣內含（英特爾的競爭對手）AMD產品的電腦，但執委會未能提出充足的證據以支

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持其結論。此外，執委會指稱，英特爾的行爲致使代工廠限制內含AMD產品之電腦的製造與販賣，但執委會亦未能提出充分的證據。

關鍵詞：英特爾案、明顯的智慧財產權壁壘、濫用獨占地位、同等效能競爭者測試法、明顯之限制

1. Introduction

The Commission of the European Union (EU) has stated in the *Intel* Decision that Intel Corporation committed an infringement of Article 102 of the Treaty on the Functioning of the European Union ('TFEU') (former Article 82 of the Treaty Establishing the European Community)[1]. According to the Decision, Intel did so by implementing strategies aimed foreclosing competitors from a Central Processing Unit (CPU) market[2]. This Article analyses the 517-page Commission Decision, which has drawn tremendous attention from the cross-national high technology companies, in particular those operating in Europe.

This Decision is controversial because, first of all, the fine of €1.06 billion has been the largest ever imposed on a firm by the Commission. Two years prior to the Intel Decision, the Court of First Instance on September 17, 2007 adopted the decision of *Microsoft v. the Commission*[3]. This judgment confirmed the fine of over €497 million imposed by the Commission[4]. Since Intel and

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1 The Commission on 21 September 2009 published the provisional non-confidential version of its 13 May 2009 Decision. Commission Decision of relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement (COMP/C-3/37.990 - Intel).

2 The text of Article 102 TFEU was untouched by the Amsterdam, Nice, and Lisbon Treaties, but what is now Article 102 was numbered Article 82 EC until the entry into force of the Lisbon Treaty on 1 December 2009.

3 Case T-201/04,Microsoft Corp. v. Commission, 2007 E.C.R. II-3601.

4 Commission Decision 2007/53/EC of 24 March 2004 relating to a proceeding pursuant to Article 82 EC and Article 54 of the EEA Agreement against Microsoft Corp. It is worth noting that on 1 March 2007, the Commission, by means of a Statement of Objections, warned Microsoft of further penalties (of up to €3 million per day) over its unreasonable pricing of the interoperability information (IP/07/269). The Commission later reached the conclusion that up until 21 October 2007 Microsoft had failed to comply with its obligation pursuant to the Commission decision to offer access to the interoperability information on reasonable and non-discriminatory terms. As a result, on 27 February 2008, the Commission adopted a decision pursuant to Article 24(2) of Regulation 1/2003, imposing on Microsoft a penalty payment of €899 million for non-compliance with its obligations. According to the Commission, the relevant period of non-compliance runs

Microsoft are American companies, the *Intel* Decision and the *Microsoft* case have rendered many entrepreneurs doubt that whether the EU has enforced competition rules in a discriminatory manner. Also, these figures have made competition law an area of EU law that probably has strongest and most direct impact on multinational enterprises. These companies have been very sceptical about the implementation of EU competition law, fearful that improper enforcement may result in disastrous consequences for their businesses. Damien Geradin doubts whether antitrust intervention is necessary in a market of a high-tech product characterised by increasing output, decreasing prices and sustained innovation. As he comments, '[t]hese characteristics alone should raise serious doubt about claims of anti-competitive foreclosure and consumer harm'[5].

Second, in the Intel Decision, the Commission held the rebates scheme implemented by Intel constituted an abuse of dominant position under Article 102 TFEU (former Article 82 EC), but the distinction between pro-competitive discounting and exclusionary rebates system is vague. In today's globalised economy, it is often seen that enterprises operate across national borders. An increasing number of business practices have an international dimension, affecting markets in many countries, often in different continents. The integration of various national or regional economies renders firms to organise various business practices on a global basis. What amounts to an anticompetitive practice? This is a question that the multinational firms have never stopped asking. Discounting practices have been considered anti-competitive in some circumstances, but discounting is a vertical practice that is presumptively pro-

from 21 June 2006 to 21 October 2007. The European Commission, *The Microsoft Case: Implementation of the Decision,* 4, http://ec.europa.eu/competition/sectors/ICT/microsoft/implementation.html, last visited November 7, 2012.

5 Damien Geradin, *The Decision of the Commission of 13 May 2009 in the Intel Case: Where is the Foreclosure and Consumer Harm?*, 4, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1490114##, last visited November 7, 2012.

competitive. Just as Herbert Hovenkamp has noted, '[i]t should be condemned only in the presence of significant market power and proven anticompetitive effects'[6].

Third, 'as efficient competitor' test, a revolutionary economic approach employed by the Commission in the field of EU competition law, gives cause for pessimism. The Commission has reiterated the importance of effects-based approach in resolving the disputes relating to abuses of dominant positions. A major concern is that the enterprises operating on the hi-tech markets in Europe are not at all familiar with the test, information of which was neither available in the TFEU nor legislation in the Union.

Intel has initiated court proceedings against the Commission before the General Court, seeking *inter alia* an annulment of the Commission Decision[7]. It has taken the Court more than three years to process this case. Whether or not Intel will succeed in this appeal remains to be seen. Given the complexity of this dispute, the judgment is not expected in six months. This Article focuses on the main issues regarding the Intel Decision, particularly the myths relating to as efficient competitor test.

2. How does the Intel Decision affect the global microprocessor industry?

Advanced Micro Devices, Inc. (hereinafter as 'AMD') in the U.S.A made complaints to the Commission in 2000 and 2003, alleging that Intel Corporation had violated Article 102 TFEU (former 82 EC) that prohibits abuses by

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6 Herbert Hovenkamp, *Discounts and Exclusions, University Of Iowa Legal Studies Research Paper No. 05-18* (August 2005), *available at* http://ssrn.com/abstract=785966 (last visited November 20, 2012) .

7 Intel initiated the court proceedings on 22 July 2009. Case T-286/09, Intel v. Commission, 2009 E.C.R II-00000.

undertakings of dominant positions[8]. This article provides that:

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

Such abuse may, in particular, consist in:

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;

(b) limiting production, markets or technical development to the prejudice of consumers;

(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

Intel has operations in different parts of the world including in locations in the European Economic Area[9]. Intel, which describes itself as the 'world's largest semiconductor chip maker, based on revenue', states that its 'products include chips, boards and other semiconductor components that are the building blocks integral to computers, servers and networking and communications products'[10].

8 *Supra* note 1, paras. 3, 5, and 6.
9 *See id*. para. 1.
10 *See id*. para. 1.

On 24 February 2009, the Commission published 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (hereinafter as the 'Guidance Paper')[11]. As to whether this Guidance Paper applies to this case, the Commission stated in the Decision that:

The guidance paper is *not intended to constitute a statement of the law* and is without prejudice to the interpretation of Article [102] by the Court of Justice or the Court of First Instance. As a document intended to set priorities for the cases that the Commission will focus upon in the future, '*it does not apply to proceedings that had already been initiated before it was published, such as this case*. ⋯' [T]he Commission considers that the guidance paper does not apply to this case. The Commission nevertheless takes the view that '*this Decision is in line with the orientations set out in the guidance paper.*'[12] (emphasis added)

2.1 Identification of relevant markets

The products at issue in the *Intel* Decision are microprocessors, also known as CPUs, which are the devices that interpret and execute instructions[13]. The CPU is the 'brain' of computer, and sometimes the phrase 'CPU' encompasses both the processor and the memory of computer[14]. CPUs used in computers can be sub-divided into two categories: the x86 and non-x86 architecture[15]. In the 1980s, IBM chose Intel x86 architecture CPUs for IBM PCs, and IBM chose Microsoft Windows as its chosen PC operating system, which was compatible with the x86 CPU[16].

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11 Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, 2009 O.J. C45/02.
12 *Supra* note 1, para. 916.
13 *See id*. paras. 106 and 107.
14 *See id*. para. 107.
15 *See id*. para. 120.
16 *See id*. para. 121.

On the basis of demand-side factors and supply-side factors, there could be one relevant market of x86 CPUs for all computers, namely desktop, laptop, and server computers. Or, there could be three relevant markets of (1) x86 CPUs for desktop computers; (2) x86 CPUs for laptop computers; and (3) x86 CPUs for server computers. In either case, on the basis of substitutability considerations, the relevant market definition does not include non-x86 CPUs or CPUs for non-computer devices[17].

2.2 Evaluation of market power

According to the Decision, Intel consistently held very high market shares in excess of or around 80 percent in an overall x86 CPU market and in excess or around 70 percent in any of the sub-markets mentioned in these subsections throughout a six year observation period. In this regard, the Commission stated that very large market shares, of over 50 percent, were considered in themselves, and but for exceptional circumstances, evidence of the existence of a dominant position[18].

In addition to the identification of market shares of Intel in the relevant market(s), the Commission identified certain barriers to entry and expansion in the relevant market(s)[19]. According to the Decision, a potential entrant is faced with *significant intellectual property barriers* and must engage in substantial initial research and development and production investment to be able to start up production of x86 CPUs. There are some other significant barriers to entry in the market, such as huge sunk costs in research and development and those in plant production. Also, once entry has taken place, the Commission noted that the production capacity of a manufacturer is limited by the size of the existing

17 *See id*. para. 835.
18 *See id*. para. 852.
19 *See id*. paras. 853-865.

facilities[20].

Putting forward two arguments, Intel asserted that it was not dominant in the x86 CPU market. First, Intel stated that the degree of buyer power in the market indicated that Intel cannot *behave independently* of its customers[21]. Second, Intel noted that the significant price declines in the CPU industry in recent years were indicative of healthy competition in the industry, which would demonstrate that Intel cannot be dominant[22].

2.3 Identification of abusive conducts

The Commission stated in the Decision that there were two kinds of abusive conduct in the present case. The first is the implementation of a rebates scheme by Intel, and the other is the naked restrictions imposed by Intel on three OEMs, including HP, Acer, and Lenovo.

2.3.1 Rebates scheme

As to the rebates scheme, the Commission stated in the Decision that the level of the rebates granted by Intel to Dell, HP, NEC between the fourth quarter of 2002 and December 2005 was de facto conditional upon those customers sourcing their x86 CPUs exclusively (Dell) or, within defined segments, almost exclusively (HP and NEC) from Intel. With regard to Dell, the level of the rebates was conditional upon purchasing all of the x86 CPUs required from Intel. With regard to HP and NEC, the level of the rebates was conditional upon sourcing most of their requirements for corporate desktop PCs and client

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20 *See id*. para. 866.

21 Intel made reference to paragraph 71 of the *Hoffman-La Roche* judgment to support its argument. '[T]he fact that an undertaking is compelled by the pressure of its competitors' price reductions to lower its own prices is in general incompatible with that independent conduct which is the hallmark of a dominant position'. Case 86/76, Hoffman-La Roche v. Commission,1979 E.C.R 461.

22 *Supra* note 1, para. 884.

PCs respectively from Intel[23].

The Commission noted that '[o]ne possible way of examining whether *exclusivity rebates* are capable or likely to cause anticompetitive foreclosure is to conduct an as efficient competitor analysis'[24]. (emphasis added) In essence, this examines whether Intel itself, in view of its own costs and the effect of the rebate, would be able to enter the market at a more limited scale without incurring losses. It thereby establishes what price a competitor, which is 'as eff icient' as Intel, would have to offer x86 CPUs in order to compensate an OEM for the loss of any Intel rebate[25]. It is worth noting that the Commission employed 'average avoidable costs' ('AAC') as a benchmark to assess the exclusionary effect of Intel's rebate schemes[26]. AAC are the average of the costs that could have been avoided if the company had not produced a discrete amount of extra output, in this case, the amount allegedly subject to abusive conduct[27]. If an as efficient competitor is forced to price below AAC, this clearly means that competition is foreclosed because the as efficient competitor incurs losses by making (incremental) sales to customers covered by the dominant firm's conduct[28].

The Commission stated that:

> [T]he as efficient competitor analysis as applied in this case examines what price an as efficient competitor would have to offer an Intel trading partner in order to compensate it for the loss of any Intel rebate. If Intel's rebate scheme means that in order to compensate an Intel trading partner for the loss of the Intel rebate, an as efficient competitor has to of-

23 *See id*. para. 1001.
24 *See id*. para. 1002.
25 *See id*. para. 1003.
26 *See id*. para. 1037.
27 *See id*. para. 1145.
28 *See id*. para. 1037.

> fer its products below a viable measure of Intel's cost, then it means that the rebate was capable of reducing access to Intel trading partners which could offer products from the as efficient competitor, or in other words capable of foreclosing a hypothetical as efficient competitor[29].

As a result, the Commission noted that '[t]his would thereby deprive final consumers of the choice between different products which the Intel trading partner would otherwise have chosen to offer were it to make its decision solely on the basis of the relative merit of the products and unit prices offered by Intel and its competitors'[30].

The analysis of the Commission indicates that an as efficient competitor would have had to offer its x86 CPUs to the OEMs, including Dell, HP, NEC and Lenovo at a price which was below its AAC to match Intel's conditional offers. In the case of MSH, the as efficient competitor would have had to offer compensation payments to match Intel's conditions which would have resulted in a net price below its AAC. That level of pricing is not viable by any economic benchmark[31]. As a result, the Commission stated that the Intel payments are capable of having or likely to have anticompetitive foreclosure effects, since even an as efficient competitor would be prevented from supplying the OEM's x86 CPU requirements or ensuring that MSH sells PCs based on its x86 CPUs[32].

Intel put forward two sets of argument to justify its rebate schemes. First, Intel stated that by using a rebate, Intel has only responded to price competition from its rivals and thus met competition. Second, Intel noted that the rebate system employed vis-à-vis each individual OEM was necessary to achieve

29 *See id*. para. 1154.
30 *See id*. para. 1154.
31 *See id*. para. 1574.
32 *See id*. para. 1575.

important efficiencies that are pertinent to the x86 CPU industry[33].

2.3.2 'Naked restrictions'

The phrase 'naked restrictions' refers to Intel's conducts restricting the commercialisation of specific AMD-based products by HP, Acer, and Lenovo[34] .Intel argued that its conducts were not abuses, because, inter alia, AMD performed better during and for some time following the alleged exclusionary period than at any other period in its 38 year history[35].

Nonetheless, the Commission stated in the Decision that the OEMs including HP, Acer, and Lenovo were planning the introduction of a specific AMD-based product. Such products either existed or technical development or preparations for introduction to the market were well advanced[36]. In each case, Intel paid the OEMs to delay, cancel or otherwise restrict the commercialisation of the planned AMD-based products. In each case, Intel's conduct had a material effect on the OEMs' decision-making in that they delayed, cancelled or otherwise restricted their commercialisation of the AMD-based computers[37]. As a consequence, AMD-based products for which there was a customer demand did not reach the market, or did not reach it at the time or in the way they would have in the absence of Intel's conduct. Customers were, therefore, deprived of a choice which they would have otherwise had and competition on the merits was harmed[38].

As a result, Intel Corporation committed an infringement of Article 102 TFEU (former Article 82 EC) by implementing strategies aimed foreclosing competitors from a CPU market. The final amount of the fine imposed on Intel

33 *See id*. para. 1625.
34 *See id*. para. 1641.
35 *See id*. para. 1668.
36 *See id*. para. 1677.
37 *See id*. para. 1678.
38 *See id*. para. 1679.

was €1.06 billion.

3 Critical analysis

Article 102 TFEU gives four examples of abusive conducts, which seem to refer to the conducts of dominant firms that harm directly those who must deal with the dominant firm. Such abuse may, inter alia, consist in imposing unfair purchase or selling prices, or in applying dissimilar conditions to equivalent transactions with other trading parties. However, the case law in the field of EU competition law has extended the prohibition from one forbidding unfair terms of dealing to one forbidding conducts that make it difficult for other f irms to compete with the dominant firm. These conducts may indirectly harm those dealing with the dominant firm, among which are the two kinds of abuse examined by the Commission in the *Intel* Decision, i.e. first, a rebates scheme that cause anticompetitive foreclosure, and second, naked restrictions.

3.1 How did the Commission carry out market power evaluation?

As to what the relevant market is in the present case, the Commission noted that on the basis of demand-side factors and supply-side factors, there could be one relevant market of x86 CPUs for all computers, or there could be three relevant markets of (1) x86 CPUs for desktop computers; (2) x86 CPUs for laptop computers; and (3) x86 CPUs for server computers.

The Commission noted that Intel had a dominant position in the market of x86 CPUs for all computers, and it also had dominant positions in all the three sub-markets. Such an opinion is based mainly on two reasons. The first reason concerned the market shares of Intel on the relevant market(s). According to the Decision, Intel consistently held market shares in excess of or around 80 percent in an overall x86 CPU market and in excess or around 70 percent in any of the sub-markets throughout a six year observation period. The second

reason was about the significant barriers to entry and expansion in the relevant market(s). According to the Decision, a potential entrant is faced with *signif icant intellectual property barriers*, and the firm must engage in substantial initial research and development and production investment to be able to start up production of x86 CPUs. Also, once entry has taken place, the production capacity of a manufacturer is limited by the size of the existing facilities. Denying that it was dominant in the x86 CPU market, Intel stated that the degree of buyer power in the market indicated that it cannot *behave independently* of its customers.

Generally, the Commission based its viewpoint only on the fact that Intel had high market shares on the relevant markets and that an entry to the relevant markets was difficult. However, the Commission failed to consider that there had been several large buyers on the x86 CPU market, in which Intel did not have full freedom of making the price of the products. It is often seen that large customers purchase products from their suppliers and at the same time demand rebates. The suppliers, large or small, do not have a choice but to follow these requests, fearful that they may lose business if they do otherwise.

In the present case, the Commission did not take into serious account the dynamics of the relevant markets. Intel was faced with probably a dozen of OEMs holding strong bargaining power and always being ready to play Intel and its major competitor AMD off each other[39]. To put it differently, the Commission was correct only to the extent that Intel held large market shares of the relevant markets, but the market power evaluation by the Commission was flawed mainly because Intel was not able freely to exercise the market power.

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39 *See id*. para. 517. As Geradin comments, the rebates scheme seen in the *Intel* Decision represent efficient risk-sharing mechanisms, and in the present case, 'OEMs make high volumes condition on low prices and suppliers make low prices conditional on large volumes'. Geradin, *supra* note 5, at 8.

The next two subsections turn to consider whether as efficient competitor test should be performed to assess the rebates scheme of Intel. The analysis is made from both legal and economic perspectives.

3.2 Economic analysis of Intel's rebates scheme

A conditional rebate, a rebate granted to customers to reward them for a particular form of purchasing behaviour, is a common business practice. As to the nature a conditional rebate, the Commission has rightly pointed out in paragraph 37 of the Guidance Paper that:

> The usual nature of a conditional rebate is that the customer is given a rebate if its purchases over a defined reference period exceed a certain threshold, the rebate being granted either on all purchases *(retroactive rebates*) or only on those made in excess of those required to achieve the threshold (*incremental rebates*)[40]. (emphasis added)

Undertakings offer conditional rebates to increase sales. By doing so, the undertakings may stimulate demand and benefit consumers. Nonetheless, in the circumstances where such rebates are granted by a firm holding a dominant position, the rebates may lead to exclusion. To decide whether a rebates system has exclusionary effect is never an easy task, because it is difficult for competition authorities to justify its punishment imposed on a firm offering discounts to customers on a highly competitive market.

Are there effective methods to determine whether a rebates policy causes anticompetitive foreclosure and therefore constitutes a violation of Article 102 TFEU? The Commission states in the Guidance Paper that the proper test that should be employed is 'as efficient competitor test'[41]. This test is referred to as

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[40] The Guidance Paper, *supra* note 11, para. 37.

[41] Nonetheless, it should be stressed that in the EU as efficient competitor test did

'equally efficient competitor' test in the U.S.A., which was developed by Richard Posner, who suggested that an exclusive practice is one that is 'likely in the circumstances to exclude from the defendant's market an equally or more eff icient competitor'[42]. Under as efficient competitor test, conduct is *prima facie* abusive if it is capable of excluding a competitor that is at least as efficient as the dominant undertaking[43]. It is worth noting that *proved consumer harm* is not a necessary element of this test[44].

The rationale behind this test is that as long as a dominant firm sells its products at an effective price (standard price minus the rebate it grants to its customers) that is above a certain measure of its costs, the rebate in question must be legal, even if it has the effect of eliminating less efficient competitors, namely weaker competitors[45]. The logic of the test is straightforward. A dominant firm should sell its products at an effective price above a certain measure of its costs. Otherwise, the rebates scheme is foreclosing.

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not receive strong judicial endorsement in rebates. Just as Renato Nazzini noted, this test has received strong judicial endorsement in predatory pricing and margin squeeze but not in other pricing abuses, in particular rebates. RENATO NAZZINI, THE FOUNDATIONS OF EUROPEAN UNION COMPETITION LAW: THE OBJECTIVE AND PRINCIPLES OF ARTICLE 102, 223 (2011).

42 RICHARD A. POSNER, ANTITRUST LAW 196 (2d ed., 2001). For a brief introduction to as efficient competitor test and a critical analysis of the major problems of this test, *see* WOLFGANG WURMNEST, *The Reform of Article 82 EC in the Light of the* "*Economic Approach*", *in* ABUSE OF DOMINANT POSITION: NEW INTERPRETATION, NEW ENFORCEMENT MECHANISMS?, 17-19 (Mark-Oliver Mackenrodt, Beatriz Conde Gallego, and Stefan Enchelmaier eds., 2008).

43 Nazzini, *supra* note 41, at 223.*See also* ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *What is Competition on the Merits*?, POLICY BRIEF 4 (June, 2006).

44 Nazzini has also noted that '[w]hen the as efficient competitor test applies, the case law is clear that consumer harm is not a necessary element of the test'. Nazzini, id. It is worth noting that, in a series of decisions in liberalized telecommunications markets, the EU courts, in applying this test, have focused on the preservation of competitive rivalry as 'equality of opportunity'. *See also* George Hay and Kathryn McMahon, *The Diverging Approach to Price Squeezes in the United States and Europe*, 8 J. COMP. L. ECONOMICS 259 (2012).

45 Geradin, *supra* note 5, at 16.

3.2.1 Myth of the Commission's analysis

As efficient competitor test was performed by the Commission to examine whether the rebates scheme of Intel could cause anticompetitive foreclosure. This test examined whether Intel itself, in view of its own costs and the effect of the rebate, would be able to enter the market at a more limited scale without incurring losses. It thereby established what price a competitor, which was 'as efficient' as Intel, would offer x86 CPUs in order to compensate an OEM for the loss of any Intel rebate.

According to the Decision, AAC are the average of the costs that could have been avoided if the company had not produced a discrete amount of extra output, in this case, the amount allegedly subject to abusive conduct. The def inition of AAC is exactly the same to that found in paragraph 26 of the Guidance Paper.[46] If an as efficient competitor is forced to price below AAC, this clearly means that competition is foreclosed because the as efficient competitor incurs losses by making (incremental) sales to customers covered by the dominant firm's conduct.

The analysis of the Commission indicates that an as efficient competitor would have had to offer its x86 CPUs to the OEMs, including Dell, HP, NEC and Lenovo at a price which was below its AAC to match Intel's conditional offers. In the case of MSH, the as efficient competitor would have had to offer compensation payments to match Intel's conditions which would have resulted in a net price below its AAC. Therefore, the Commission stated that the Intel payments are capable of having or likely to have anticompetitive foreclosure effects. The Commission therefore concluded that the rebates scheme implemented by Intel constituted an abuse of dominant position in the relevant market.

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46 Guidance Paper, *supra* note 11, para. 26,.

It is unfortunate that the explanations regarding the theoretical aspects of as efficient competitor test do not help the public fully understand how the Commission performed this test. First, the Commission does not provide an example illustrating how the test was performed. Second, the crucial figures concerning the rebates scheme were unavailable owing to confidentiality concerns. The myth of how the test was applied by the Commission would presumably create chilling effects on numerous firms in various European markets, particularly those holding dominant positions.

3.2.2 How to perform as efficient competitor test?

This study makes an effort to transform the economic concepts offered by the Commission into an example. In order to illustrate how as efficient competitor test was performed in the Decision, it is necessary to elaborate first on how relevant measures of cost are used in the application of as efficient competitor test.

As regards cases of rebates systems, a cost measure helps reveal whether a dominant firm makes unprofitable sales or, to be more precise, whether the sales of the firm are irrational economically but for its obvious exclusionary effect. In the Intel Decision, the Commission used the cost benchmark of AAC to assess the exclusionary effect of the rebate schemes implemented by Intel. When effective price (standard price minus the rebate it grants to its customers) is set below AAC, the firm experiences a negative cash flow on its sales at that price. Prices below AAC should trigger antitrust inquiry because they suggest that the firm is making sales unprofitable and may reflect an effort to exclude[47]. In most cases, AAC and Average Variable Cost (AVC) will be the same, as it is often only variable costs that can be avoided[48]. However, com-

[47] U.S. Department of justice, Competition and Monopoly: Single-Firm Conduct Under Section 2 of the Sherman Act 65 (2008).

[48] There can be instances where some fixed costs would be included in AAC, such as

pared to AVC, AAC is widely considered to be a better cost measure to evaluate a rebates system. A major shortcoming of AVC is that it measures the average cost of the entire output, not just that of the incremental output that is the focus of the foreclosure claim.

The following example illustrates how as efficient competitor test was perceived and performed by the Commission in the Intel Decision. Suppose that a CPU producer holding a dominant position on the x86 CPU market produces 1,000 CPUs at a variable cost of €700 each with no fixed costs. There is a major rival for the dominant firm on the market of x86 CPUs. The dominant firm produces additional 800 CPUs at a variable cost of €850 each to compete with the major competitor. Since the dominant CPU producer would have sold 1,000 CPUs without making an attempt to compete with the rival firm, the potentially foreclosing increment is 800 CPUs. The dominant firm's AVC is approximately €767 per CPU[49]. The dominant firm's AAC is €850 per CPU.50 The price of an x86 CPU produced by the dominant firm is €1,000. This firm implements a rebates scheme, according to which trading partners, i.e. certain OEMs, receive a 20 percent discount on the condition that the OEMs purchase CPUs from the dominant firm exclusively or almost exclusively. The discounted price is thus €800. Consequently, in order to sell its CPUs to these OEMs, a hypothetical as efficient competitor must sell a CPU at a price of less than €800, which is €780 for instance.

A crucial question is then whether the rebates scheme, according to which the OEMs receive a 20 percent discount, causes anticompetitive foreclosure. The rationale behind as efficient competitor test is: Even if the major

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if some fixed costs were incurred to produce the increment, but would have been avoided if that increment had not been produced. For example, suppose that the dominant firm had a factory capable of producing 1,500 units and that to produce additional 500 units the firm must expand the factory. The cost of expansion is included in AAC. *Ibid*, at 64-65.

49 (1,000 CPUs at €700 each + 800 CPUs at €850 each) divided by 1,800 units.

competitor is as efficient as the dominant firm, it must set its price at a level that can compensate the loss of the rebate. Otherwise, the OEMs would never be interested in purchasing the CPUs produced by the competitor. As regards the example above, since €800 is well below the AAC, namely €850, the rebates scheme therefore potentially causes anticompetitive foreclosure. To perform this test, competition authorities must focus on whether a hypothetical competitor, though as efficient as the dominant firm, would be prevented from operating on the market because the business will incur loss.

3.2.3 The dynamics of relevant markets

In response to the Intel Decision, Intel argued that it was able to discount its products because it had made consistent investments in developing the manufacturing technology and these investments were successful. Stressing that 'Intel never sells products below cost', Mr. Paul Otellini, Intel President and CEO, stated that Intel 'consistently *invested in innovation*, in manufacturing and in developing leadership technology. The result is that we can discount our products to compete in a highly competitive marketplace, passing along to consumers everywhere the efficiencies of being the world's leading volume manufacturer of microprocessors'[51]. (emphasis added) In a statement entitled 'Why the European Commission's Intel Decision is Wrong', Intel noted that '[o]ur ability to discount springs from *ongoing investments in the latest manufacturing technology* and the efficiencies gained from being the leading volume manufacturer of microprocessors'[52]. (emphasis added)

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50 (800 CPUs at €850 each) divided by 800 units.

51 Intel Corporation, *EC Ruling: Statement by Intel President and CEO Paul Otellini,* http://www.intc.com/releasedetail.cfm?ReleaseID=383625&ReleasesType=Financial%20News, last visited November 7, 2012.

52 Intel Corporation, *Why the European Commission's Intel Decision is Wrong,* http://www.intel.com/pressroom/legal/docs/EC_response092109.pdf, last visited November 7, 2012.

It remains unclear whether Intel has put forward these arguments before the General Court. Nonetheless, the analysis above indicates that these opinions may not help Intel argue successfully before the Court. The Commission did not doubt that Intel had made consistent efforts in the latest manufacturing technology. In fact, Intel's long term investment in research and development rendered the Commission ensure that the dominant firm had significant market power in the relevant market(s)[53]. Therefore, it is difficult for Intel to justify its rebates system by stressing that it was successful in manufacturing microprocessors and developing leading information technology.

As to whether the Intel rebates scheme causes anticompetitive foreclosure, the dynamics of the relevant markets must be examined carefully. In the present case, Intel was faced with probably a dozen of OEMs holding strong bargaining power and being ready to play Intel and its major competitor AMD off each other. As seen earlier, Intel did not have full freedom in exercising its market power owing to the strong bargaining power of the OEMs, namely the trading partners of Intel. This study argues that the rebates system in question was a scheme made under the influences exercised by Intel, AMD, and the OEMs. Intel and the OEMs made every effort to alter the level of rebates with a view to increasing their profits on the relevant market(s).

3.3 Legal uncertainty

Now this study turns to consider the issue from a legal perspective. The key issue here concerns the extent to which the Commission can adopt an effects-based approach, namely as efficient competitor test, to determine whether the practices of a dominant firm is an abuse where this approach is not set out in any Treaty provisions or legislation in the EU.

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53 As seen earlier, the Commission based its views on the fact that Intel had large market shares in the market and that a potential entrant was faced with significant intellectual property barriers.

3.3.1 Application of a non-binding measure?

As to whether the Guidance Paper applies to this case, the Commission on the one hand noted that the Guidance Paper was not intended to constitute a statement of the law. According to the Decision, the Guidance Paper did not apply to proceedings that had already been initiated before it was published, such as this case. On the other hand, the Commission stated that the Decision was in line with the 'orientations' set out in the Guidance Paper. The Commission held that the Guidance Paper did not apply to the *Intel* case, because first, it was not intended to constitute a statement of the law, and it was therefore non-legally binding. Second, the Commission published the document after it initiated the proceedings against Intel. What the Commission emphasized was that it made the Decision without applying the non-legally binding document, but the analysis and conclusion of this Decision appeared to be consistent with the objectives of the document.

Which parts of the Decision were consistent with the objectives of the Guidance Paper? The Commission gave an answer in paragraph 1002 that '[o]ne possible way of examining whether exclusivity rebates are capable or likely to cause anticompetitive foreclosure is to conduct an as efficient competitor analysis'[54]. This means that as efficient competitor test was one of the economic tests that can be employed to examine the exclusiveness of the Intel rebates scheme. The Commission decided to use this economic test instead of others, and this test *appeared* to be the one recommended by the document.

Was it possible for Intel to realize that as efficient competitor test would be employed to assess the rebates scheme at issue? This is a crucial question that the Commission avoided to answer. The Commission said that it did not apply the Guidance Paper, a non-legally binding measure in which as efficient

54 *Supra* note 1, para. 1002.

competitor test was set out, to the *Intel* case, but it seems that this was not so. Given the huge portion of economic analysis based on the test in the Decision, it is obvious that the Commission applied the Guidance Paper, in particular as efficient competitor test set out in the document, to the case. The Commission regarded this test as the best strategy to determine whether the Intel rebates scheme was foreclosing. As a matter of fact, the analysis based on application of the test can be found in paragraphs 1002 to 1576 (pages 302 to 453) of the Decision. The way in which the Commission applied the test shows that the Commission did so as if the Guidance Paper was legally binding.

3.3.2 Violation of the principle of legal certainty?

This study argues that the application of as efficient competitor test is flawed and the test should not have been performed in the *Intel* Decision because Intel could not find it anywhere in EU law. Even the Guidance Gaper does not provide an example or a general formula to explain how the test can be employed.

The application of the test has constituted a violation of the principle of legal certainty, a widely recognized principle of EU law[55]. Legal certainty, sometimes referred to as 'legal security' (*sécurité juridique*, in French) is a concept which cannot be easily explained in a few words, but the principle requires in particular that rules *involving* negative consequences for individuals should be clear and precise and their application predictable for those subject to them[56]. Just as Trevor Hartley has noted, 'predictability is probably the core

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[55] Case C 110/03, Belgium v. Commission, 2005 E.C.R I-2801, para. 30; Case C 2/06, Willy Kempter KG v. Hauptzollamt Hamburg-Jonas, 2008 E.C.R I-411, para. 37; and, Case C 201/08, Plantanol GmbH & Co. KG v. Hauptzollamt Darmstadt, 2009 E.C.R I-8343, para. 43 and 44.

[56] Case C 226/08, Stadt Papenburg v. Bundesrepublik Deutschland, 2010 E.C.R I-131, para. 45; *see also* Case C 63/93, Duff v. Minister for Agriculture and Food, 1996 E.C.R I-569, para. 20; Case C-17/03, Vereniging voor Energie, Milieu en Water and Others v. Directeur van de Dienst uitvoering en toezicht energie, 2005

aspect of [the principle of legal certainty]'[57]. To put it differently, individuals must know their rights and obligations precisely and they must be able to rely on them[58]. In addition, that imperative of legal certainty must be observed all the more strictly in the case of rules liable to have financial consequences[59].

As regards decisions made by the Commission under Article 102 TFEU, the application of as efficient competitor test definitely involves possible negative consequences for dominant firms. The test should be clear and precise under the TFEU or the other legislation in the Union. The application of the test must be predictable for any undertakings subject to this test. In the present case, Intel has initiated court proceedings against the Commission before the General Court. The Court should focus on whether it was possible for Intel to realise that the test would be applied to assess the rebates scheme at issue, which could eventually lead to the conclusion that the implementation of the scheme constituted an abuse of dominant position under Article 102 TFEU. According to the Decision, the Commission adopted the measure after Intel implemented the rebates scheme. As it was impossible for Intel to get access to an unpublished document, the Intel Decision should be annulled for that the application of as efficient competitor test violated the principle of legal certainty.

E.C.R I-4983, para. 80; and Case C 76/06 P, Britannia Alloys & Chemicals v. Commission, 2007 E.C.R I-4405, para. 79.

57 An introduction of this principle recognised by the European Court can be found in Trevor Hartley, The Foundations of European Community Law 146-151 (5th ed. 2003).

58 Case C 158/06, Stichting ROM-projecten v. Staatssecretaris van Economische Zaken, 2007 E.C.R I-5103, para. 25; and Case C 345/06, Gottfried Heinrich, 2009 E.C.R I-1659, para. 44.

59 The Stichting ROM-projecten case, para. 26; Case C 94/05, Emsland-Stärke GmbH v. Landwirtschaftskammer Hannover, 2006 E.C.R I-2619, para. 43; and C-248/04, Koninklijke Coöperatie Cosun UA v. Minister van Landbouw, 2006 E.C.R I-10229, para. 79.

3.4 No firm basis for the conclusion of naked restrictions

The Commission stated that Intel had imposed naked restrictions on the OEMs including HP, Acer, and Lenovo. According to the Decision, the OEMs were planning the introduction of a specific AMD-based product, but in each case, Intel paid the OEMs to delay, cancel or otherwise restrict the commercialisation of the planned AMD-based products. The Commission also noted that in each case, the conduct of Intel had a material effect on the decision-making of OEMs in that they delayed, cancelled or otherwise restricted their commercialisation of the AMD-based computers.

Nevertheless, it is doubtful whether this was really so. For instance, in the case of Acer, the AMD-based products at issue were a laptop and a desktop computer series based on Athlon 64 x86 CPUs produced by AMD. The Commission presented no evidence to support the conclusion that Intel paid Acer to restrict the commercialisation of the products at issue. What the Commission stated was that '[c]ontemporaneous evidence demonstrates that Acer executives experienced both direct and indirect pressure from Intel to not launch Athlon 64-based products, or not to be the first OEM to launch them'[60]. The Commission added that the understanding of Acer was that if it did not follow the request by Intel, certain Intel funding would fall[61].

Indeed, Intel might react negatively to the relationships between Acer and AMD, and Acer later decided to postpone the launch of its AMD-based laptop computer series. Nonetheless, some negative response from Intel, a major competitor of AMD on the x86 CPU market, was not at all surprising. The pressure from Intel does not seem to be sufficient for the Commission to conclude that Intel paid Acer to restrict the commercialisation of the products at issue.

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60 *Supra* note 1, para. 1660.
61 *See id*. para. 1661.

It must also be stressed that the evidence presented by the Commission does not provide a sound basis for the conclusion that '[i]n each case, Intel's conduct had a material effect on the OEMs' decision-making in that they delayed, cancelled or otherwise restricted their commercialisation of the AMD-based computers'. For example, in the case of Lenovo, the Commission only referred to the fact that Lenovo entered into a written agreement with AMD to launch AMD-based laptop computers in 2006, and this proposed launch was postponed twice[62]. According to the Decision, '[t]he first postponement happened in the context of negotiations of increased funding with Intel. The second postponement occurred as a condition of increased funding from Intel as agreed in June 2006. Finally the launch was cancelled'[63]. As far as the first postponement was concerned, the Commission obviously failed to show that it was the funding negotiations concerned that led to the postponement of AMD-based laptop computers.

4. Conclusion

In the Intel Decision, there could be one relevant market of x86 CPUs for all computers, namely desktop, laptop, and server computers, or there could be three relevant markets of (1) x86 CPUs for desktop computers; (2) x86 CPUs for laptop computers; and (3) x86 CPUs for server computers. As to the market power of Intel in the relevant market(s), Intel consistently held very high market shares in an overall x86 CPU market and in any of the sub-markets. The Commission also identified certain barriers to entry and expansion in the relevant market(s). According to the Decision, Intel should be responsible for two kinds of abusive conduct. The first is the implementation of a rebates scheme by Intel and the other is the naked restrictions imposed by Intel on three OEMs, including HP, Acer, and Lenovo.

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62 *See id*. para. 1663.
63 *See id*. para. 1663.

As regards the rebates scheme, the reasoning behind the *Intel* Decision is simple and clear: Intel is a dominant firm on the markets of x86 CPUs and this CPU producer abused its dominant position by operating an exclusionary rebates scheme. The application of as efficient competitor test indicates that the effective prices of Intel products were below AAC, therefore an as efficient competitor might not able to compete with Intel. As far as the naked restrictions are concerned, Intel paid the OEMs to restrict the commercialisation of planned AMD-based products. The Commission also noted the conduct of Intel had a material effect on the decision-making of OEMs in that they restricted their commercialisation of the AMD-based computers.

This study indicates that the Intel Decision should be annulled by the General Court since it is significantly flawed. First of all, in the present case, the Commission did not take into serious account the dynamics of the relevant markets. The Commission was correct only to the extent that Intel held large market shares of the relevant markets at that time, but the market power evaluation by the Commission was defective mainly because Intel was not able freely to exercise the market power. Since Intel was faced with OEMs that had extraordinary bargaining power, the argument by Intel before the General Court should be based on how these OEMs were ready to play Intel and its major competitor AMD off each other. Also, Intel should elaborate on why it was incapable of behaving independently from the OEMs.

Second, the Commission's explanations for the theory of as efficient competitor test do not help the public fully understand how the Commission performed this test. On the one hand, the Commission does not provide an example illustrating how the test was performed. On the other hand, the crucial f igures concerning the rebates scheme were unavailable owing to confidentiality concerns. The myth of how the test was applied by the Commission would presumably create chilling effects on numerous firms in various European

markets, particularly those holding dominant positions. To eliminate the risk of being punished by the Commission, the dominant firms must carry out a regular examination of their own cost structures. It must be emphasized that the Commission has employed AAC as a benchmark to determine whether a rebates scheme has exclusionary effect. The Commission has focused its attention on the average cost of the incremental output, instead of that of the entire output. Proved consumer harm has never been a necessary element of as eff icient competitor test.

Third, this Article argues that the rebates system in question was a scheme made under the influences exercised by Intel, AMD, and the OEMs. It is worth noting that Intel and the OEMs made every effort to alter the level of rebates with a view to increasing their profits on the relevant market(s). Fourth, given the huge portion of economic analysis based on as efficient competitor test in the Decision, it is obvious that the Commission applied the Guidance Paper, in particular as efficient competitor test set out in the document, to the *Intel* case. The way in which the Commission applied the test shows that the Commission did so as if the Guidance Paper was legally binding.

The General Court should focus on whether it was possible for Intel to realise that the test would be applied to assess the rebates scheme at issue, which could eventually lead to the conclusion that the implementation of the scheme constituted an abuse of dominant position under Article 102 TFEU. According to the Decision, the Commission adopted the measure after Intel implemented the rebates scheme. As it was impossible for Intel to get access to the unpublished document, the Intel Decision should be annulled for that the application of as efficient competitor test violated the principle of legal certainty. Where the Commission is entitled to make use of any economic tools in dealing with an Article 102 TFEU case, such enforcement may jeopardise the very core of the competition law system. This study argues that as efficient competitor test

can be applied if it is in the future incorporated into relevant Treaty provisions or legislation in the Union. Intel is under no legal obligation to perform the test to assess its own rebates scheme, as there is so far no such legal requirement under EU competition law.

As regards the issues of naked restrictions, the Commission failed to present sufficient evidence to support its view that Intel paid the OEMs to restrict the commercialisation of planned AMD-based products. Also, the Commission failed to prove that the conduct of Intel had a material effect on the decision-making of OEMs in that they restricted the commercialisation of AMD-based computers.

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