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**Behavioral Economics and Abuse of Dominance:  
A Proposed Alternative Reading of the Article 102 TFEU Case-Law**

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## ABSTRACT

Behavioral economics has become a popular field of study. With the reconsideration of the *homo economicus* paradigm, psychology and sociology have infiltrated economic theory. More recently, several commentators have argued in favor of an incorporation of behavioral economics within antitrust law. This paper argues, however, that EU competition law already integrates the findings of behavioral economics. A review of the Article 102 TFUE case-law reveals that contrary to the more conservative approach adopted by US agencies and courts, EU competition authorities already acknowledge the boundaries and biases of economic agents, and take into account the limits of the rationality assumption whilst drafting their decisions.

**Behavioral Economics and Abuse of Dominance:  
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*Nicolas PETIT and Norman NEYRINCK<sup>1</sup>*

**Introduction**

The purpose of this paper is to demonstrate that European competition lawyers – or at least most of them – do not need a shrink. More seriously, this paper underlines that a significant body of behavioral economics has already penetrated European Union (“EU”) competition law, in particular in the area of abuse of dominance. The big, recent buzz around behavioral economics in the competition community may thus just be an illustration of the “revival” factor. With a nice, startling package, one can make old products look new, and sell opium to the masses<sup>2</sup>.

But let’s first take a step back. In essence, behavioral economics posits that individuals do not necessarily behave rationally. For physiological, cognitive and psychological reasons, individuals cannot – and do not – accumulate, process and analyze all the relevant information necessary to make welfare-optimizing decisions<sup>3</sup>. As a result, individuals on markets

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<sup>2</sup> Law, just like any other discipline, is subject to trends and fashions which shape its content. Historical studies, for example, have always been shaped by the ideological context of the moment. Today, “subaltern studies” – or the study of the life of common people – is the last trend of writing history, after Imperialism, Primitivism, Nationalism, Marxism, and Feminism. See O. LIGADE, “Subaltern Studies : A New Trend in History Writing”, *International Research Journal*, 2010, Vol. I, N°6, p. 62.

<sup>3</sup> Individuals do not act rationally. Human behavior presents features such as "bounded rationality," "bounded willpower," and "bounded self-interest." The first of these terms refers to the fact that people have “cognitive quirks that prevent them from processing information rationally”; the second that they exhibit weakness of will; and the last refers to the fact that people “sometimes act out of motives that do not seem explicable by self-interest”. R. POSNER, “Rational Choice, Behavioral Economics, and the Law”, *Stanford Law Review*, 1998, Vol. 50, No. 5, p. 1551. M. STUCKE, “Money, Is That What I Want?: Competition Policy and the Role of Behavioral Economics”, *Santa Clara Law Review*, 2010, Vol. 50, p. 101

Recent best-sellers have popularized behavioral economics: J. FOX, *The Myth Of The Rational Market: A History Of Risk, Reward, And Delusion On Wall Street*, New York, HarperBusiness, 2009, 400p.; G. AKERLOF & R. SHILLER, *Animal Spirits: How Human Psychology Drives The Economy, And Why It*

(*consumers*) make decisions which do not maximize their own satisfaction. Consumers of telecommunications or banking services do not switch, despite price competition. Similarly, individuals within firms (*managers*) make decisions which do not maximize profits. They for instance engage into exclusionary tactics, regardless of the costs associated to such conduct.

To solve those problems, a more interventionist course of action – behavioral scholars talk of “*paternalism*”, or of “*liberal paternalism*” – is allegedly warranted<sup>4</sup>. This applies to competition rules, which should arguably be tweaked to correct behavioral failures. The debate on this issue is raging in the US, where the rationality assumption inherited from the works of Chicago scholars has shaped decades of antitrust case-law.

On this side of the Atlantic, however, the European Commission (the “Commission”) and the EU Courts have seemed – consciously or not – more opened to behavioral economics when applying substantive competition law. The case-law adopted pursuant to Article 102 of the Treaty on the Functioning of the European Union (“TFEU”) exhibits a noticeable degree of sympathy for the insights of behavioral economics. This is true in relation to the two analytical steps involved in a finding of unlawful conduct, namely the assessment of dominance (I) and the identification of an abuse (II).

## **I. Dominance**

The penetration of behavioral economics in conventional dominance analysis can be observed firstly at the level of market definition (A), and secondly in relation to the assessment of the investigated firm’s market position (B).

### **A. Market definition**

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*Matters For Global Capitalism*, Princeton, Princeton University Press 2009, 264 p. ; D. ARIELY, *Predictably Irrational: The Hidden Forces That Shape Our Decisions*, New York, HarperCollins, 2008, 304p. ; R. THALER & C. SUNSTEIN, *Nudge: Improving Decisions About Health, Wealth, And Happiness*, New Haven, Yale University Press, 2008, 293 p.

<sup>4</sup> See HM Government, “The Coalition: our programme for government”, May 2010, p.12 (available at: [http://www.cabinetoffice.gov.uk/media/409088/pfg\\_coalition.pdf](http://www.cabinetoffice.gov.uk/media/409088/pfg_coalition.pdf)): “We need to promote more responsible corporate and consumer behaviour through greater transparency and by harnessing the insights from behavioural economics and social psychology.”

In EU competition law “a relevant product market comprises all those products and/or services which are regarded as [...] substitutable by the consumer, by reason of [their] characteristics, [...] prices and [...] intended use”<sup>5</sup>. In order to assess demand-side substitutability, the Commission routinely relies on a proxy, the “SSNIP” test<sup>6</sup>. It involves testing whether customers of the investigated firm would switch to alternative products in response to a hypothetical small (5% to 10%) but permanent relative price increase. If substitution takes place, additional products shall be included in the relevant market.

Behavioral economics provides some interesting insights on the issue of market definition. Irrational consumers may distinguish between goods which would otherwise be regarded as substitutes. The preference shown for a *branded* product as compared to a similar, unbranded good, may for instance lead to imperfect substitution patterns. In the same vein, the signature of a designer on a product; its endorsement by a celebrity (an artist or a sports professional); or its association to a social group (for instance, Veblen goods) may disconnect a particular good from its initial substitution category. The same applies again to generics medicines which are often perceived as different from original drugs, despite identical features.

In the present state of EU competition law, the practice of market definition seems to already incorporate – at least in part – the findings of behavioral economics. First, if irrational consumers perceive theoretical substitutes as distinct products, then the SSNIP test will almost certainly lead to the delineation of distinct markets. If consumers regard a branded product as having no equivalent, it is likely that they will not shift to other products in response to a SSNIP price increase<sup>7</sup>.

Second, the Commission is not blind to irrationality. It expressly follows “*an open approach to empirical evidence, aimed at making an effective use of all available information which may be*

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<sup>5</sup> Commission Notice on the definition of relevant market for the purposes of Community competition law, *O.J.*, 9 Dec. 1997, C 372, p. 5, para. 7.

<sup>6</sup> *Ibid.*, para. 17. ; SSNIP is an acronym for “Small but Significant and Non-transitory Increase in Price”.

<sup>7</sup> “Perhaps, without knowing it, the counsel and judiciary were applying behavioral economics !” See V. ROSE, “The Role of Behavioral Economics in Competition Law: A Judicial Perspective”, *Competition Policy International*, Spring 2010, Vol. 6, N°1, pp. 106-107, who reports that black t-shirts bearing the logo of a rock band may constitute a market distinct from the market for t-shirts. This can be reflected in the price discrepancy between the two kind of products: average t-shirts were sold £3, while t-shirts with the logo were sold £18.

*relevant in individual cases*<sup>8</sup>. In practice, it thus relies on empirical information – point of sales scanner data and market interviews – which provides useful information on irrational factors that shape consumers’ demand<sup>9</sup>.

Of course, a note of caution is necessary here. Interviews are not fully reliable. Individuals answer differently according to the way questions are phrased, so that so-called “*framing*” issues play an important role<sup>10</sup>. Answers to questionnaires may for instance reflect strategic biases or intrinsic behavioral biases (*esprit de corps*, *fairness*, *etc.*)<sup>11</sup>. It is thus important that competition authorities’ corroborate the findings of market interviews with other pieces of evidence, such as raw, commercial data.

## **B. Dominance**

A same finding applies in the province of dominance. Put simply, a firm is deemed to occupy a dominant position where it enjoys significant market power. In the past, the Commission traditionally relied on market shares as a proxy for dominance. More recently, however, the Commission has placed an increased emphasis on the analysis of barriers to entry/expansion<sup>12</sup>. The conventional economic view is, indeed, that absent such barriers, no firm can exercise market power, on pain of inducing expansion/entry of rival firms.

On this particular issue, behavioral economics bring interesting insights. It demonstrates first that competition authorities run a risk of type II errors (false negatives), in dismissing

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<sup>8</sup> Communication from the Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, *OJ*, C 45, 24 Feb 2009, pp. 7–20, [hereinafter “Guidance Document”] para. 25.

<sup>9</sup> The Commission also acknowledges the influence brands may have on market definition. Commission Notice on the definition of relevant market for the purposes of Community competition law, *op. cit.*, para. 41.

<sup>10</sup> People make different choices when the same information is presented in different way. See M. SALINGER, “Behavioral economics, consumer protection and antitrust”, *Competition Policy International*, Spring 2010, Vol. 6, n°1, p. 71.

<sup>11</sup> It is for example asserted that biases of economic operators who were interviewed in the framework of merger investigations may have had the effect to lead to inappropriate mergers. See R. AMANDA & M. STUCKE, *Behavioral Antitrust*, 31 March 2010, University of Tennessee Legal Studies Research Paper No. 106., p. 42 (available at <http://www.ssrn.com>).

<sup>12</sup> Guidance Document, *op. cit.*, para. 9-12. The assessment of dominance is now made by the Commission on the basis of three factors: the market position of the dominant undertaking and its competitors ; the constraints imposed by the credible threat of future expansion by actual competitors or entry by potential competitors; the constraints imposed by the bargaining strength of the undertaking's customers.

dominance concerns on the basis of observed low entry barriers. Empirical analysis indeed demonstrates that irrational factors may dissuade entry in markets with low entry barriers<sup>13</sup>. Because individuals prefer a sure low gain to a higher hypothetical gain<sup>14</sup>, a potential entrant will prefer to spend resources, and secure gains, on its existing market, rather than to enter a new market, where gains are potentially higher, but haphazard. Moreover, organizational issues may also discourage entry. Large companies are in theory well-placed to exploit entry opportunities (they hold resources, *etc.*). However, in practice, their ability to enter a market might be undermined by bureaucratic gridlock<sup>15</sup>.

Second, behavioral economics shows that competition authorities run a risk of type I errors (false positives), in reaching findings of dominance on account of high entry barriers. In blunt contradiction with neoclassical economic theory, empirical analysis indicates that firms often enter markets that are protected by high barriers<sup>16</sup>. To start, decision-makers often tend to be overconfident, by virtue of optimism and desirability biases<sup>17</sup>. Those individuals typically underestimate basic economic facts which run contrary to their projects, and overestimate the intrinsic value of their purported plans. In such settings, of course, entry may fail<sup>18</sup>, but the threat of irrational entry will discipline the incumbent firm.

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<sup>13</sup> For an important set of markets where anticompetitive conducts took place despite the fact that these markets were characterized by low entry barriers which should have induced entry, see M. STUCKE, “Behavioral Economists at the Gate: Antitrust in the 21st Century”, *Loyola University Chicago Law Journal*, 2007, vol 38, pp. 563-568.

<sup>14</sup> This bias was demonstrated through a famous experience which established that test subjects tend to prefer a sure gain (e.g. a \$50 reward) to a gamble (a fifty percent probability of winning \$100), but are more willing to gamble a loss (opting for the fifty percent chance of paying a \$100 fine), than paying a sure penalty (\$50 fine). D. KAHNEMAN, “Maps of Bounded Rationality: Psychology for Behavioral Economics”, *American Economic Review*, 2003, Vol. 93, p.1456. See also R. KOROBKIN & T. ULEN, “Law & Behavioral Science: Removing the Rationality Assumption from Law & Economics”, *California Law Review*, 2000, Vol. 88, p. 1105.

<sup>15</sup> On all these points, see M. STUCKE, “Behavioral Economists at the Gate: Antitrust in the 21st Century”, *op. cit.*, pp. 568-572.

<sup>16</sup> Entrants disregard many entry barriers. They are not significantly deterred from industries where capital intensity and scale economics play an important role. They disregard sunk cost effects. See A. TOR, “The Fable of Entry: Bounded Rationality, Market Discipline, and Legal Policy”, *Michigan Law Review*, Vol. 101, pp. 493-494.

<sup>17</sup> Managers tend to be overoptimist about their capacities and their firms. For a survey of the studies on this phenomenon, see: C. ENGEL, *The Behaviour of Corporate Actors. A Survey of the Empirical Literature*, Preprints of the Max Planck Institute for Research on Collective Goods, Bonn 2008/23, May 2008, p. 7 (available at: <http://www.ssrn.com>).

<sup>18</sup> Empirically, entrants exhibit strikingly high mortality rate; those who survive are characterized by low penetration figures: “Within ten years, only about 20% of any entrant cohort still operates. Attrition, moreover, begins right from the start, with more than 25% of new entrants exiting within two years, over 60% disappearing within five years.” See A. TOR, “The Fable of Entry: Bounded Rationality”, *op. cit.*, p. 491.

In addition, in markets where barriers to entry take the form of sunk costs (costly advertisement campaigns or R&D investments), managers may nonetheless decide to enter. This is because – contrary to a dogma of neo-classical economics – firms can, and do, recoup sunk costs when fixing their prices<sup>19</sup>.

All this indicates that an abstract appraisal of barriers to entry is insufficient to assess dominance<sup>20</sup>. Modern EU competition law seems to be generally in line with this. The recent Commission Guidance document on Article 102 stresses the importance of going beyond an impressionistic identification of barriers to entry, and insists on proving “*likely*” entry. The Commission declares that it will only take account of entry that “*is likely, timely and sufficient*”<sup>21</sup>.

## **II. Abuse**

Even more remarkably, a random walk through Article 102 TFEU case-law suggests that behavioral economics has been, and may be relevant, in many abuse of dominance cases<sup>22</sup>.

### **A. Predatory Pricing**

Under conventional economic theory, a dominant firm engages into unlawful predation when it sets prices below costs (at a loss) to force rivals off the market. From a conventional, industrial organization perspective, predatory pricing is akin to a two-stage investment strategy. The dominant firm incurs short-term losses because it anticipates to secure long-term benefits. This view has been strictly endorsed in the US, where courts dismiss predatory pricing allegations

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<sup>19</sup> M. ARMSTRONG and S. HUCK, “Behavioral Economics as Applied to Firms: A Primer”, *Competition Policy International*, Spring 2010, vol 6, n°1, p. 27.

<sup>20</sup> Hence, in assessing the probability of entry, regulators should only focus on larger, diversifying entrants which are likely to exercise short-term competitive pressure. A. TOR, “A behavioural approach to antitrust law and economics”, *Consumer Policy Review*, 2004, Vol. 14, n°1, p. 4

<sup>21</sup> Similarly, its document also declares that “For expansion or entry to be considered sufficient, it cannot be simply small-scale entry, for example into some market niche, but must be of such a magnitude as to be able to deter any attempt to increase prices by the putatively dominant undertaking in the relevant market.” Guidance document, *op. cit.*, para. 16.

<sup>22</sup> There is an unlawful abuse when the dominant firm excludes its competitors (exclusionary abuse) or exploits its customers (exploitative abuse) in an anticompetitive way.



absent proof that recoupment of losses is possible<sup>23</sup>. Pricing below costs absent a reasonable prospect of recoupment is irrational. The courts thus consider that predatory pricing has not happened<sup>24</sup>. This solution is often portrayed as overly generous to the dominant firm. Yet, as any firm which generates losses, the dominant firm that prices below costs, compromises its chances to stay viably on the market, with the distrust of capital markets, shareholders, suppliers, *etc.* In other words, the market will self-correct the anomaly of pricing below costs absent recoupment, in pushing the dominant firm out of business.

Behavioral economics suggests, however, that predatory pricing is more pervasive than predicated by industrial organization theory. Overoptimistic managers may, for instance, price below costs absent realistic recoupment perspectives. In the same vein, pride, vengeance, arrogance or hubris may prompt irrational managers to launch a price war regardless of its costs<sup>25</sup>. Finally, regardless of recoupment, dominant firms may simply engage into predation to enjoy a “*quiet*” life. The outcome of predation, although irrational in the classic economic sense, is “*satisfactory*” and thus makes sense from a behavioral standpoint<sup>26</sup>.

Unlike US antitrust law, EU competition law accommodates irrational predation scenarios. According to the Commission’s Guidance document, the determination of abusive predation exclusively hinges on the existence of a sacrifice, *i.e.* a price below costs<sup>27</sup>. By contrast, a finding of abuse is not contingent on the proof of plausible recoupment. In the recent *France*

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<sup>23</sup> See, for example, See for example: US Supreme Court, 21 June 1993, *Brooke Group Ltd v. Brown & Williamson Tobacco Corp*, 509 US 209, 113 S. Ct 2578.

<sup>24</sup> Concretely, it results in situations in which, “If a plaintiff’s complaint describes a conspiracy that the judge concludes is irrational, then the court rules that the conspiracy must not have happened as a matter of law, regardless of the evidence presented by the plaintiff to support its claim”, C. LESLIE, “Rationality Analysis in Antitrust”, *University of Pennsylvania Law Review*, Jan. 2010, Vol. 158, n°2, p. 269.

<sup>25</sup> M. ARMSTRONG and S. HUCK, *op. cit.*, p. 16. The proclivity of individuals to satisfy their appetite for vengeance has been demonstrated through the Ultimatum Game. Here, two players must share a specified prize. One player suggests a way to share the prize, while the second answer to the offer. If they find an agreement, the prize is divided accordingly. Otherwise, neither player gets anything. A rational outcome would be for the responder to accept a small offer, since he should prefer a small payoff to nothing. However, it is observed that responders generally accept to sacrifice offers they judge unfair, in order to punish the adverse, stingy party for the unfairness of his offer. R. THALER, “Anomalies: The Ultimatum Game”, *The Journal of Economic Perspectives*, 1988, Vol. 2, No. 4. p. 195.

<sup>26</sup> People do not tend to maximize their profits, but, instead, to reach a satisfactory level of outcome. See M. ARMSTRONG and S. HUCK, *op. cit.*, p. 22.

<sup>27</sup> However, other practices might also be taken into account by the Commission to determine whether a specific practice constitutes a predatory abuses – including any losses that the alleged predator could have avoided. Guidance document, *op. cit.*, para. 64 and 65.

*Telecom* ruling, the Court held that the proof of recoupment was not a “*precondition*” to establish an abuse<sup>28</sup>. This is also the view taken by the Commission in its Guidance document<sup>29</sup>.

On close examination, EU predatory pricing law seems even behavioralist in essence. The Court has for instance repeatedly held that the reason for the prohibition of predatory pricing lies in the fact that pricing below-costs is wholly *irrational* conduct, which can only be motivated by exclusionary intent<sup>30</sup>. In other words, what matters is the mindset, and motives, of dominant firms, not their economic ability to exclude<sup>31</sup>.

## **B. Tying/Bundling**

### **a. Tying/Bundling as an exclusionary abuse**

In a conventional tying/bundling scenario, a dominant firm in market A seeks to leverage its market position to market B, by subordinating the sale of A to the purchase of B (tying); by selling only a bundle of products AB (pure bundling); or by granting a rebate on the bundle of products AB (mixed bundling)<sup>32</sup>.

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<sup>28</sup> GC, 30 Jan. 2007, T-340/03, *France Télécom v. Commission*, *E.C.R.*, 2007, p. II-00107, para. 228. Prior to this, there were doubts. Referring to the Tetra Pak ruling, commentators held that “In fact, the Court does not say in paragraph 44 that it would never be necessary to show the feasibility of recoupment, but only that it would not be appropriate in the circumstances of the present case.” A. JONES & B. SUFRIN, *EC Competition Law. Text, Cases, and Materials*, Oxford, Oxford Publishing, 2008, 3<sup>rd</sup> ed., p. 461.

<sup>29</sup> “As predation may turn out to be more difficult than expected at the start of the conduct, the total costs to the dominant undertaking of predating could outweigh its later profits and thus make actual recoupment impossible while it may still be rational to decide to continue with the predatory strategy that it started some time ago.” Guidance document, *op.cit.*, para. 71, footnote 6.

<sup>30</sup> The case-law relies on below-cost pricing benchmarks as surrogates for exclusionary intent. A similar psychological background explains the somewhat disconcerting prohibition of certain above-costs pricing practices under EU law, when there is proof of a deliberate plan to remove a competitor of the market. Under EU law, the state of mind, and motives, of dominant firms are key to the assessment. Overall, behavioral economics supports the policy choices made by the EU institutions to discard recoupment as a necessary condition for a finding of infringement under Article 102 TFEU.

<sup>31</sup> See GC, *France Télécom*, *op. cit.*, para. 110.

<sup>32</sup> In a few cases, the Commission issued statements of objections for mixed bundling practices –or “multi-products rebates”. Mixed bundling is characterized by the fact that consumers are free to buy each good individually, as both tying and tied products are made available separately, but the sum of the prices when sold separately is higher than the bundled price. In the *Coca-Cola Company* case, for example, the Commission drove the giant of Atlanta to accept negotiated commitments and put an end to mixed bundling practices. Coca-cola agreed to no longer offer rebate to its customers who committed to buy less popular products together with its strongest brands. See Commission decision of 22 June 2005 relating to a proceeding pursuant to Article 82 of the EC Treaty and Article 54 of the EEA Agreement (Case COMP/A.39.116/B2 — Coca-Cola), OJ, L253/21.

Tying may constitute an unlawful abuse<sup>33</sup>, if the dominant firm forecloses equally efficient competitors<sup>34</sup>. In this regard, a key, critical condition for a finding of abuse is that customers are “coerced” (or forced) to purchase the tied product. Coercion may take the form of a physical tie (a common packaging) or of an economic tie (a rebate on the purchase of the two products). Absent any such tie, standard economic theory predicts that consumers will turn to competitive products.

Against this background, behavioral economics suggests that dominant firms may also leverage market power absent coercion, simply by exploiting customers’ intrinsic biases<sup>35</sup>. To take a simple example, laptop buyers are generally prone to buy a laptop bag in the shop where they purchase their computer, because of inertia, hassle costs, availability heuristics and risk aversion<sup>36</sup>. In such a setting, the laptop manufacturer may leverage its market power on the market for bags, by taking advantage of consumers’ weaknesses. He will simply have to display the two products in the same retail outlet. Consumers will end up purchasing the two products, regardless of the absence of coercion and of the existence of competitive alternatives in other points of sales<sup>37</sup>.

Again, EU abuse of dominance law accommodates such scenarios of “psychological” bundling. In its *Microsoft* decision in 2004, the Commission found that Microsoft had unlawfully bundled its operating system Windows with its Windows Media Player (“WMP”). In this case, however, Microsoft had not coerced in the economic or technical sense. Customers had not been required to pay anything extra for WMP. In addition, customers could

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<sup>33</sup> According to Article 102 TFUE, an “abuse may, in particular, consist in (...) 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”.

<sup>34</sup> Guidance document, *op. cit.*, para. 59-61.

<sup>35</sup> M. BENETT, J. FINGLETON, A. FLETCHER, L. HURLEY and D. RUCK, “What Does Behavioral Economics Mean for Competition Policy?”, *Competition Policy International*, Spring 2010, vol 6, n°1, p. 121 : “Behavioral economics suggests that even small switching costs can have significant effects on consumer behavior in the presence of consumer inertia, endowment effects, and default bias. This can, in turn, make foreclosure more likely to occur through tying and bundling.”

<sup>36</sup> Because computers are both expansive and fragile, it is not unlikely that consumers who have made such spending feel the compulsive need to immediately buy a sleeve for the protection of their laptop. Risk aversion could explain such a behaviour, as well as availability heuristic, the experience of the expense being the most vivid to the memory just after the payment.

<sup>37</sup> Therefore, leveraging could occur between two complementary products solely because the commercial environment bundles the products.

freely decide to use rival media players through “*multi-homing*” (acquire, install and use several media players on a single PC). This notwithstanding, the Commission found that the pre-installation of WMP on Windows had created an environment conducive to leveraging, because of “*end-users inertia*”<sup>38</sup>. The Commission for instance noted at ¶845 of its decision that “*Users who find WMP pre-installed on their client PCs are indeed in general less likely to use alternative media players as they already have an application which delivers media streaming and playback functionality*”. This finding was upheld by the CFI<sup>39</sup>.

This shows that EU competition law captures anticompetitive bundling strategies which go well beyond conventional economic theory.

#### **b. Remedies for Abusive Bundling – “Nudging” Customers?**

The issue of remedies in bundling cases illustrates even more clearly the blending of EU competition law and behavioral economics. To stick to the example of the *Microsoft I* case, the Commission had ordered the dominant firm to eliminate the abuse by commercializing a naked version of Windows, devoid of WMP<sup>40</sup>. A few months later, only a few thousands version of this stripped software had been sold, and most end-users continued to use WMP<sup>41</sup>.

Interestingly, a little later, the Commission applied an entirely different remedy in the context of a wholly similar case, the *Microsoft II* case. This case concerned the tying of the web browser Internet Explorer to Windows. The Commission obtained from Microsoft the commitment to make available a “ballot screen” forcing new Windows PC users to initially

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<sup>38</sup> Commission Decision of 24 March 2004 relating to a proceeding under Article 82 of the EC Treaty (Case COMP/C-3/37.792 Microsoft), para 870.

<sup>39</sup> GC, 17 Sept. 2007, T-201/04, Microsoft v. Commission, *E.C.R.*, 2007, p. II-03601.

<sup>40</sup> Commission Decision of 24 March 2004 relating to a proceeding under Article 82 of the EC Treaty (Case COMP/C-3/37.792 Microsoft), Article 6, p. 300.

<sup>41</sup> As media players are widely available for free, the Commission did not impose on Microsoft to charge a lower price for the unbundled version of Windows. As could have been expected in such circumstances, the operation amounted to a commercial failure: no computer manufacturer in the world chose to install the unbundled version of Windows on any of their computers; retailers bought 1,787 copies which amounted to less than 0.005 percent of the copies of all sales of Windows XP sold at retail in Europe. See C. AHLBORN and S. EVANS, “The Microsoft Judgment and its Implications for Competition Policy towards Dominant Firms in Europe”, *Antitrust Law Journal*, 2009, Vol. 75, No. 3, p. 24 ([http:// www.ssrn.com](http://www.ssrn.com)).

make a pre-selection between a range of competing web browsers<sup>42</sup>.

This new remedy draws obvious inspiration from the approach advocated by behavioralist scholars Thaler and Sunstein in their best-seller *Nudge*<sup>43</sup>. Because a simple remedy removing the antitrust offense – such as the one devised in the *Microsoft I* case – was ill-suited to restore competition, the Commission opted for a more intrusive, “paternalistic” remedy, which nudges consumers to make a choice<sup>44</sup>.

### C. Refusal to deal

The conventional theory of harm ascribed to refusals to deals is as follows. A vertically-integrated firm that controls an essential upstream input (a network, an intellectual property right, *etc.*) can foreclose downstream rivals by refusing them access to its input. In turn, the degree of competition on the downstream market might be harmed.

In recent years, US antitrust law and EU competition law have followed different approaches in relation to refusals to supply. In the US, the Supreme Court ruling in *Trinko* has reduced somewhat drastically the circumstances under which a firm may be found guilty of unlawful refusal to supply. Amongst other things, the Supreme Court indeed considers that firms’ *ex ante* incentives to invest might be undermined by intrusive *ex post* regulatory takings and price controls.

By contrast, in the EU, the CFI *Microsoft* ruling has significantly extended the range of circumstances under which a dominant firm can be ordered to deal with rivals. The EU courts allegedly exhibit less concerns in relation to dominant firms’ *ex ante* incentives to invest<sup>45</sup>.

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<sup>42</sup> Summary of Commission Decision of 16 December 2009 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement (Case COMP/39.530 — Microsoft (Tying)), OJ, 13 Feb. 2010, C 36/7.

<sup>43</sup> See *supra*, note 2.

<sup>44</sup> If this new remedy was to fail again – because, for instance, consumers are reluctant to execute a browser they have never heard about – the Commission might have to consider new ways to assist customers in future cases. Many IT websites are community driven. Therefore in *Microsoft*, the Commission could have, for instance, required the dominant firm to integrate within the ballot screen random abstracts from these sites in order to provide a review of the browsers and independent guidance to the customers as to what choice to make.

<sup>45</sup> If the Commission, on its side, still refers to the need to preserve *ex ante* incentives to invest (Guidance document, *op. cit.*, para. 75), only three conditions must be met for an order to supply to be issued. It suffices to prove that the refusal relates to a product or service that is objectively necessary, that it is likely to foreclose

On close examination, behavioral economics bring support to the expansive interpretation endorsed by the EU Courts. First, recent economics findings indicate that individuals occasionally suffer from an “*endowment effect*”. Anyone who owns a good tends to value it above the market price and demands more for it than what he would be willing to pay to acquire a similar good<sup>46</sup>. Behavioral economics thus warrants regulatory intervention because holders of essential facilities often (i) charge abnormal input prices to their rivals and (ii) overestimate the value of their asset, and in turn the alleged chilling effect on their *ex ante* incentives to invest.

Second, behavioral economics dismisses the concerns of a number of commentators, who – in the aftermath of the *Microsoft* case – have argued that the Court’s case-law would disincentivize investments into innovation. Given that managers “*discard events of extremely low probability*”<sup>47</sup>, it is unlikely that the few Article 102 TFEU cases ordering a duty to deal will ever deter firms to innovate<sup>48</sup>.

#### **D. Unfair trading conditions**

Unlike in US antitrust law, a prime objective of EU competition law is to ensure that dominant firms do not directly exploit their customers by charging supra-competitive prices and other anticompetitive commercial conditions. Article 102(a) TFEU provides to this effect that dominant firms shall not “*directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions*”.

A key finding of behavioral economics is that when customers face complex pricing strategies, characterized by a low up-front fee coupled with expensive follow-on services, they often end-

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competitors and in turn, lead to consumer harm. (*Ibid.*, para. 81). The proof that the refusal prevents the appearance of a new product is no longer requested.

<sup>46</sup> D. KAHNEMAN, J. KNETSCH and R. THALER, “Experimental Tests of the Endowment Effect and the Coase Theorem”, *Journal of Political Economy*, 1990, Vol. 98, p.1327; R. POSNER, *op. cit.*, p. 1565.

<sup>47</sup> D. KAHNEMAN and A. TVERSKY, “Prospect theory: An analysis of decision under risk”, *Econometrica*, 1979, N° 47, pp. 275 and 282 (available at : <http://www.hss.caltech.edu/~camerer/Ec101/ProspectTheory.pdf>).

<sup>48</sup> Orders to deal are quite uncommon. Moreover, because of the availability heuristic bias, it is very likely that market operators tend to forget or neglect the relevance of past orders which have been issued years ago, beyond the temporal border of memory. The negative effect of such an order on innovation would thus only impact the dominant firm targeted by the remedy.

up with undesired deals. Naïve, short term-sighted customers will indeed over-consume, either because they under-estimate the costs they will later incur<sup>49</sup>.

With this in mind, manufacturers can manipulate customers through “shrouding” practices (or “hidden charges”). For instance, shrouding is often said to arise in relation to video rentals (with huge penalties for delay), hotel services (with shrouded charges for parking, internet access, *etc.*) or mobile telephony (with excessive international roaming charges). Shrouding may also take place in aftermarkets (printers and ink cartridges, for instance)<sup>50</sup>. Because shrouding has undesirable effects on consumers, several behavioral economists have called for public intervention through regulation<sup>51</sup>.

Again, EU competition law provides a basis to curb dominant firms’ shrouding practices. In *Tetra Pak II*, for instance, the Commission found that a dominant had unlawfully rented packaging equipment to its customers on unfair, shrouded, conditions. Customers of the dominant firm that had modified or moved the leased equipment had been requested to pay an “*amount not only equivalent to almost all present and future rental payments combined but moreover roughly the same as, and sometimes even higher than, selling prices*”<sup>52</sup>.

In the same vein, the Commission found that Tetra Pak's right to fix a penalty at its own discretion in case of contractual infringement was tantamount to an unlawful abuse. On the facts, the penalties amounted could be up to 5 to 10 % of the base rental, or equivalent to

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<sup>49</sup> Or because they over-estimate valuable usage. A good example of this phenomenon can be given by the functioning of the bank sector. Firms exploit the weaknesses of naïve consumers by tilting prices for credit cards towards very low or zero upfront fees and higher interest rates. “Ultimately, naïve consumers end up accepting too many credit cards and also consuming too many credit card loans” See J. GANS, “Protecting Consumers by Protecting Competition”: Does Behavioural Economics Support this Contention ?, 31 May 2005, p. 5 (available at : <http://www.mbs.edu/home/jgans/papers/consumerprotection.pdf>).

<sup>50</sup> M. BENETT & AL., *op. cit.*, p. 135, note 31. Interestingly, the authors notice that the 2000 version of the Vertical Restraints Block Exemption Guidelines explicitly mention that tying may lead to supra-competitive prices, especially “in the case of long-term contracts or in the case of aftermarkets with original equipment with a long replacement time [as] it becomes difficult for customers to calculate the consequences of the tying.” Commission notice, Guidelines on Vertical Restraints, *O.J.*, C 291, 13 Oct. 2000, p. 43, para. 217.

<sup>51</sup> See, for example: X. GABAIX & D. LAIBSON, *Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets*, 11 April 2005, pp. 25-26 (available at: <http://www.williamboot.net/wp-content/uploads/2007/02/gabaix-laibson.pdf>); J. GANS, *op. cit.*, p. 12. Regulators could for instance compel disclosure of information or simply warn consumers to pay attention to hidden costs. However, it is unlikely that more information may help the consumer if the consumer cannot properly assess the information.

<sup>52</sup> Commission Decision of 24 July 1991 relating to a proceeding pursuant to Article 86 of the EEC Treaty (92/163/EEC IV/31043 - Tetra Pak II), *O.J.*, L-72/1, para. 131.

approximately one year's rental payments<sup>53</sup>.

Of course, Article 102 TFEU only applies to dominant firm's conduct. EU competition law thus offers no means to eradicate shrouding practices which, as shown by behavioral economics, may occur in oligopolistic markets where no firm individually occupies a dominant position (for instance, in the banking, insurance or mobile telephony sectors). This being said, EU competition authorities could, at least in theory, challenge such hidden charges through creative interpretations of Article 102 TFEU. Coupled with the growing influence of behavioral economics, the embryonic doctrine of collective dominance may, for instance, provide a legal basis to this end<sup>54</sup>.

### **Conclusion**

The above remarks tend to demonstrate that EU competition law, and in particular the law of abuse of dominance, does not disregard – and may even have drawn inspiration from – the insights of behavioral economics. In a not insignificant number of cases, the Commission and the EU Courts have strayed away, consciously or unconsciously, from the neo-classical dogma of economic rationality. This, in turn, may explain some discrepancies between, on the one hand, the intrusive EU enforcement practice under Article 102 TFEU and, on the other hand, the more conservative approach of US agencies and courts in the area of unilateral conduct.

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<sup>53</sup> *Ibid.*, para. 142.

<sup>54</sup> The Guidance document explicitly disregards exploitative practices. Yet, although rare, decisions on abuse of dominance for unfair trading conditions exist.