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Restrictions on Innovation in EU Competition Law

Pablo Ibáñez Colomo *

Abstract: This paper discusses, in light of the practice of the European Commission, the different ways in which innovation considerations can be introduced in EU competition law. In some cases, such considerations have played an indirect role in the analysis. These are instances in which harm to innovation has been presumed or inferred by proxy from the effects of a practice on the competitive process (for instance, the foreclosure of a rival or the creation of a near monopoly). It is difficult to see anything controversial, or parameter-specific, in these cases. They reflect the approach to contemporary enforcement, which revolves essentially around the analysis of markets and does not require direct evidence of the impact of a practice on, *inter alia*, prices, output or product quality. Innovation-related arguments may also be introduced as an alternative to the orthodox approach to enforcement. For instance, they may be introduced in lieu of foreclosure analysis in a case where intervention requires evidence of an exclusionary effect. Instead of showing that the practice would lead to foreclosure, the authority or claimant would claim that the practice reduces the rate of innovation. It is submitted that there is no room in EU competition law for the direct introduction of innovation considerations.

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1. INTRODUCTION

The rhetoric of innovation is very much present in the contemporary discourse of competition authorities, including the European Commission (hereinafter, the ‘Commission’). Several factors explain this trend. It is generally accepted that innovation is more important for economic growth than the usual concerns underlying competition law intervention.¹ It is therefore natural that agencies claim that their activity contributes to one of the key drivers of long-term prosperity. The prominence of innovation is also the consequence of the shift in the enforcement priorities of these agencies. Recent administrative activity reveals a focus on intellectual property-intensive and high technology industries, in which firms compete less around price and output and more for the research and development of new goods and services.²

The debate about the role of innovation in competition law analysis has been far less vigorous in Europe than in the US. The Commission seems to take it as a given that competition law enforcement is beneficial not only for price, quality and output but also for the process of innovation.³ This proposition has been disputed on the other side of the Atlantic, where several authors have explored the reasons why there is no reason to assume that there is a link between innovation and the degree of market concentration or on market power found in a given industry.⁴

¹ This idea is well captured in Mark A. Lemley, ‘Industry-Specific Antitrust Policy for Innovation’ (2011) *Columbia Business Law Review* 637. The author uses a graphical example to make a point that he takes as given. He asks rhetorically whether one would prefer a ‘monopolistically-priced iPod or a perfectly competitive market for 8-track tapes’. In the same vein, Easterbrook famously observed that ‘[a]n antitrust policy that reduced prices by 5 percent today at the expense of reducing by 1 percent the annual rate at which innovation lowers the cost of production would be a calamity. In the long run a continuous rate of change, compounded, swamps static losses’. See Frank H. Easterbrook, ‘Ignorance and Antitrust’, in Thomas M. Jorde and David J. Teece (eds), *Antitrust, Innovation, and Competitiveness* (New York: Oxford University Press, 1992), p.119.

² In the past few years, the Commission has devoted substantial resources to two relatively novel issues relating to the exploitation of intellectual property rights. One has to do with settlements concluded between pharmaceutical companies and generic producers. See in particular Decision of 19 June 2013 relating to a proceeding under Article 101 of the Treaty on the Functioning of the European Union and Article 53 of the EEA Agreement (COMP/AT.39226 – *Lundbeck*) [2015] OJ C80/13. The second one relates to the use of injunctions in patent disputes. See in particular Decision of 29 April 2014 addressed to Motorola Mobility LLC relating to proceedings under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement (AT.39985 – *Motorola – Enforcement of GPRS standard essential patents*).

³ See in this sense the positions publicly taken by Commissioners and high-level officials, including Alexander Italianer, ‘Competition Policy in the Digital Age’, *47th Innsbruck Symposium: Real sector economy and the internet – digital interconnection as an issue for competition policy* (Innsbruck, 7 March 2014), available at http://ec.europa.eu/competition/speeches/text/sp2014_01_en.pdf; Joaquin Almunia, ‘Intellectual Property and Competition policy’, IP Summit 2013 (Paris, 9 December 2013); and Joaquin Almunia, ‘EU Competition Policy and Innovation’ IBA 17th annual competition conference (Florence, 13 September 2013).

⁴ See in particular J. Gregory Sidak and David J. Teece, ‘Dynamic Competition in Antitrust Law’ (2009) 5 *Journal of Competition Law and Economics* 581; and David J. Teece, ‘Favouring Dynamic over Static Competition: Implications for Antitrust Analysis and Policy’, in Geoffrey A. Manne and Joshua D. Wright (eds), *Competition Policy and Patent Law under Uncertainty* (New York: Cambridge University Press, 2011), p.203.

Similarly, the idea that competition law should protect and promote innovation does not seem to have given rise to much controversy in Europe. In practice, it seems to have been incorporated as one of the goals that the discipline should advance. As will be discussed below, it has in fact become relatively frequent for the Commission to claim that action in a given case is justified by the likely impact of a practice or a corporate transaction⁵ on innovation, by which it is meant the development of new products and the improvement of existing ones.⁶

It is not clear how EU competition law engages with innovation-related issues. The Commission has not spelled out the criteria that it follows to introduce innovation considerations in the analysis of practices. This is not a minor question. Any choices made in this sense can have a significant impact on the way in which the discipline is defined and enforced. Competition law, in the EU and beyond, has traditionally been driven by what are known as *static* concerns – and in particular by changes in the structure of the relevant market. It is not immediately obvious how innovation considerations are relevant in such a framework, at least if they are understood to reflect a concern with the evolution of an industry beyond the short-run. If they are introduced in competition law analysis, they could entail a move away from such a *static* understanding of the discipline to endorse a *dynamic* view thereof. Thus, intervention would no longer revolve primarily around the creation or the strengthening of market power, but around the likely effects of a practice on the rate of technological progress.

This article explores the extent to which innovation considerations have a place in EU competition law analysis. It appears that the Commission has introduced such considerations in two main ways. In some cases they have been *indirectly* considered by the authority. These are instances where innovation has been assumed to be negatively affected by the creation or the strengthening of market power. In other words, a negative impact of innovation was not the event that triggered intervention, but rather a negative and undesirable consequence of the likely reduction in the competitive constraints faced by firms (through consolidation or the exclusion of a rival). In other cases, innovation considerations have been of *direct* relevance for their outcome. It is possible to identify in the practice of the Commission some decisions that suggest that intervention was triggered by innovation concerns as such. Put differently, the need for remedial action was established in light of the impact of the practice on innovation, and not so much on the competitive pressure faced by firms.

⁵ The expression ‘practice’ will be used hereinafter as a shorthand to refer both to conduct examined under Article 101 and 102 TFEU and to concentrations within the meaning of the Merger Regulation (Regulation 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1).

⁶ It is difficult to infer from the practice of the Commission an operational definition of the concept of innovation. The most articulate definition of what the authority understand by innovation for the purposes of the enforcement of EU competition law is to be found in the Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C1/1, para 119. For more systematic attempt to define the concept, see Sofia Ranchordas, ‘Innovation Experimentalism in the Age of the Sharing Economy’ (2105) 19 Lewis & Clark Law Review, forthcoming.

It is submitted that there is nothing controversial or exceptional in the introduction of innovation considerations in an *indirect* way. EU competition law, as it currently stands, revolves primarily around the analysis of markets and in this sense remains quintessentially *static* in nature. So long as the Commission (or a claimant in a private dispute) is in a position to show, to the requisite legal standard, that firms' ability and/or incentive to compete on the relevant market(s) has been reduced (or is likely to be reduced) as a consequence of a given practice, it does not seem necessary to establish or precisely quantify the impact of the said practice on prices, output, or other parameters of competition – including innovation. What is more, it is clear that a negative impact on every single parameter of competition would not be required to establish a prohibition. As a result, it is difficult to see how the introduction of innovation considerations (or their absence from the analysis) can determine or influence, in practice, the outcome of a given case. This conclusion is supported by the case law.

On the other hand, there are reasons to see with concern the *direct* introduction of innovation considerations in the analysis. This claim is easily understood if one takes into consideration the fact that EU competition law is not, and has never been, a tool to achieve optimal outcomes (whether these are measured in terms of price, innovation, or by reference to any other benchmark). EU competition law accepts inefficiency. The point of the discipline is to preserve the observable competitive constraints faced by firms, not to fine-tune the relevant market to improve its performance. Administrative action that seeks to directly increase in the rate of innovation via targeted intervention entails a fundamental departure from the nature and scope of EU competition law. There are several reasons why such a transformation is at odds with several well-established principles of the discipline.

2. THE *INDIRECT* ROLE OF INNOVATION CONSIDERATIONS IN EU COMPETITION LAW ANALYSIS

2.1. THE LOGIC OF CONTEMPORARY ENFORCEMENT

The contemporary enforcement of EU competition law revolves around the creation and strengthening of market power. In relation to Article 101(1) TFEU, the Commission takes the view that restrictive effects on competition within the meaning of the provision are likely to arise in instances where the agreement strengthens the market power of the parties.⁷ The same can be said of

⁷ Guidelines on the application of Article 81(3) of the Treaty [2004] OJ C101/27, para 25.

concentrations within the meaning of Regulation 139/2004.⁸ Article 102 TFEU, in turn, reflects a dual concern with the exercise of substantial market power by the dominant firm vis-à-vis customers, suppliers and end consumers (what are known as exploitative practices) and with the strengthening of such power following the foreclosure of rivals (what are known as exclusionary practices).⁹

Market power is defined as the ability to influence prices and output, and, more broadly, to deviate from efficient outcomes at the expense of consumers.¹⁰ As much as its creation and strengthening, market power is typically inferred by proxy. The definition of the relevant market makes it possible to develop an informed idea of rivals that have the ability and the incentive to influence the conduct of a firm (that is, to act as an effective competitive constraint),¹¹ as well as the relative strength of each player. Administrative action under competition law still takes as a starting point the rough presumption according to which less concentrated markets are more competitive than more concentrated ones. Similarly, the higher the market share enjoyed by a firm, the higher the market power it is presumed to enjoy.

Under Article 102 TFEU and in the field of merger control, for instance, a firm is presumed to enjoy a dominant position where its market share reaches or exceeds 50%.¹² Vertical restraints are presumed to be compatible with Article 101 TFEU where the market shares of both the supplier and the distributor are below 30%.¹³ Presumptions built around market shares may be reversed or reinforced when other features of the relevant market are taken into consideration. High market shares may not faithfully reflect the competitive pressure to which a firm is subject if barriers to entry are low, or if the evolution of the sector suggests that they fluctuate rapidly and frequently.¹⁴ Similarly, an analysis of the relevant market alone may exaggerate the extent to which two firms exercise pressure on one another if they are distant competitors in a segment where products are heterogeneous.¹⁵

⁸ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5 (hereinafter, the 'Horizontal Merger Guidelines'), para 8; and Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2008] OJ C265/6 (hereinafter, the 'Non-Horizontal Merger Guidelines'), para 11.

⁹ Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C45/7 (hereinafter, the '2009 Guidance'), paras 5-7.

¹⁰ The Horizontal Merger Guidelines [2004] OJ C31/5 define, in para 8, 'increased market power' as 'the ability of one or more firms to profitably increase prices, reduce output, choice or quality of goods and services, diminish innovation, or otherwise influence parameters of competition'.

¹¹ Commission Notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C372/5.

¹² *AKZO v Commission* (62/86) [1991] E.C.R. I-3359, para 60. See also Horizontal Merger Guidelines [2004] OJ C31/5, para 17.

¹³ Article 3 of Commission Regulation 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices [2010] OJ L102/1.

¹⁴ See Horizontal Merger Guidelines [2004] OJ C31/5, paras 64-75.

¹⁵ *Ibid.*, paras 28-29.

Proxies are also useful to evaluate the impact of a practice on competition. The fundamental question in this regard is whether the firm(s) will remain subject to effective competitive constraints following the (actual or likely) change in the market structure entailed by the practice. It has become commonplace to advance a ‘theory of harm’, that is, an account of the mechanism through which rivalry can be expected to be weakened in light of the specific features of the relevant market and of the position of the parties therein.¹⁶ For instance, intervention under Article 102 TFEU may be based on the ability and the incentive of the dominant firm to exclude its rivals by means of tying.¹⁷ Similarly, administrative action may be justified under Article 101 TFEU if the Commission has reasons to believe that an exclusive distribution agreement, in the context in which it is implemented, leads to collusion between competing suppliers.¹⁸ In the field of merger control, a transaction bringing together two competing firms may give rise to non-coordinated effects if, inter alia, the parties are close competitors, have a large market share, and customers have limited possibilities of switching suppliers.¹⁹

In the current state of EU competition law, the quantification of the – actual or likely – impact of conduct on the different parameters of competition is not a precondition for intervention. Depending on the case, the Commission – or a claimant in a private dispute – would need to show, at most, that a firm (or a group thereof) will not be (or is unlikely to remain) subject to effective constraints. Establishing an infringement does not require directly assessing the precise impact of the practice on, inter alia, prices, output, quality or innovation. Such effects are often inferred by proxy from an analysis of the features of the relevant market and the reduction in competitive pressure. As will be shown below, EU courts have validated this approach.

Under Articles 101 and 102 TFEU, some practices are deemed anticompetitive by their very nature, that is, irrespective of their impact on the competitive process.²⁰ Evidence of an anticompetitive effect is required for other practices.²¹ As far as the latter are concerned, it is not necessary to directly

¹⁶ For an analysis of the evolution of Commission practice in this sense, see Hans Zenger and Mike Walker, ‘Theories of Harm in European Competition Law: A Progress Report’, in Jacques Bourgeois and Denis Waelbroeck (eds), *Ten Years of Effects-Based Approach in EU Competition Law* (Brussels: Bruylant, 2012), p.185.

¹⁷ 2009 Guidance [2009] OJ C45/7, paras 47-62.

¹⁸ Guidelines on vertical restraints [2010] OJ C130/1, para 154.

¹⁹ Horizontal Merger Guidelines [2004] OJ C31/5, paras 24-38.

²⁰ For instance, ‘horizontal price-fixing by cartels’ is prohibited under Article 101 TFEU as restrictive of competition by object. See in this sense *Groupement des Cartes Bancaires v Commission* (C-67/13 P) September 11, 2014, para 51. The same can be said, in the context of Article 102 TFEU of exclusive dealing and loyalty rebates. See in this sense *Hoffmann-La Roche & Co. AG v Commission* (85/76) [1979] E.C.R. 461, para 89.

²¹ For instance, exclusive dealing under Article 101 TFEU requires an analysis of the restrictive effects of the practice on competition. See in this sense *Stergios Delimitis v Henninger Bräu AG* (C-234/89) [1991] E.C.R. I-935, paras 10-12. In the context of Article 102 TFEU, ‘margin squeeze’ practices and selective price cuts are only abusive when an anticompetitive effect can be shown. See, in relation to the former, *Deutsche Telekom AG v Commission* (C-280/08 P) [2010] E.C.R. I-9555, paras 250-251; and *Konkurrensverket*

quantify the impact of the practice on the different parameters of competition to establish a *prima facie* prohibition. The Court of Justice (hereinafter, the ‘Court’, or the ‘ECJ’) has consistently held that Articles 101 and 102 TFEU do not only prohibit conduct that causes direct harm to consumers but also behaviour that harms the competitive process as such.²² Thus, it would not be a valid defence for a firm to argue that the authority or the claimant did not establish the impact of the practice on, *inter alia*, prices, output or innovation.

The same conclusions extend to the realm of merger control. A significant impediment to effective competition can be established to the requisite legal standard if the Commission is in a position to show that the sources of competitive pressure to which the merging parties are subject would be significantly weakened as a result of the operation. In other words, it is possible to establish the impact of an operation on the different parameters of competition by proxy, that is, by examining the features of the relevant market and the position of the merging parties therein.²³ The General Court (hereinafter, the ‘GC’) validated this approach in *Ryanair/Aer Lingus*.²⁴ The company argued before the GC that the Commission had not shown that the elimination of the rivalry following the acquisition of Aer Lingus would harm consumers. This argument was summarily dismissed in the judgment. The GC took the view that the negative effects on consumers had been sufficiently established by the Commission once it had been shown that the operation would eliminate the rivalry between the two merging parties and that market entry constraining the behaviour of the new entity was unlikely.²⁵ The GC expressly took the view that any claims relating to the impact of the operation on consumers did not add anything to the arguments concerning the evaluation of the competitive constraints placed on Ryanair by Aer Lingus.²⁶ It concluded the analysis by pointing out that the operation would have led to the emergence of ‘monopolistic, quasi monopolistic or very significant’ dominant positions and that such findings were ‘sufficient, in themselves, to validate the Commission’s finding that the implementation of the merger should be declared incompatible with the [internal] market’.²⁷

v TeliaSonera Sverige AB (C-52/09) [2011] E.C.R. I-527, para 61; and, in relation to the latter, *Post Danmark A/S v Konkurrencerådet* (*Post Danmark I*) (C-209/10) [2012] EU:C:2012:172, paras 34-39.

²² See, in the context of Article 101 TFEU, *GlaxoSmithKline Services Unlimited and others v Commission* (*Glaxo Spain*) (C-501/06 P, C-513/06 P, C-515/06 P and C-519/06 P) [2009] E.C.R. I-9291, para 63; and, in the context of Article 102 TFEU, *TeliaSonera* [2011] E.C.R. I-527, para 24.

²³ See in this sense the analytical framework provided for in the Horizontal Merger Guidelines [2004] OJ C31/5 and the Non-Horizontal Merger Guidelines [2008] OJ C265/6. For an analysis of the practice of the Commission that confirms this point, see James S. Venit, ‘Widening the ‘gap’ – the substantial lessening of the Commission’s evidentiary burden and the demise of coordinated effects under the SIEC test and §§24/25 of the Horizontal Merger Guidelines’ (2015) European Competition Journal, forthcoming.

²⁴ *Ryanair Holdings plc v Commission* (T-342/07) [2010] E.C.R. II-3457.

²⁵ *Ibid.*, para 224.

²⁶ *Ibid.*, para 225.

²⁷ *Ibid.*, para 445.

2.2. HARM TO INNOVATION AND THE LOGIC OF CONTEMPORARY ENFORCEMENT

Reduced competitive pressure can be presumed to harm firms' ability and incentive to innovate in the same way that it is routinely deemed to have a negative impact on, *inter alia*, prices and output. Under the logic of contemporary enforcement, the Commission is indeed likely to make claims about the effects of a practice on innovation where the available evidence suggests that firms compete less on price than over the development of new products. Suffice it to mention some examples to illustrate this idea. In *Intel* – to take an Article 102 TFEU case – the Commission claimed, after establishing their likely exclusionary effects, that the contested unilateral practices had a negative impact on AMD's ability to recover its investments in research and development and thus on its incentive to engage in similar activities in the future.²⁸ In *UTC/Goodrich* – to take a merger case –, the Commission concluded that the operation would lead to the emergence of a near monopoly on one of the markets affected by the transaction. The impact on the merged entity's incentives to devote resources to research and development activities was one of the expected consequences of the change in the market structure leading to the creation of a superdominant firm.²⁹

Where firms compete primarily – if not exclusively – for the development of new products (or the improvement of existing ones), it may not always be possible to make sense of the impact of a practice by examining the operation of the relevant market. Market definition may prove an impossible exercise. This fact does not mean that firms do not constrain the behaviour of one another. In the same way that competition within the relevant market is understood to lead to low prices, competition in innovation can be presumed, *inter alia*, to increase the likelihood that new products will be developed and/or to accelerate their launch. By the same token, reduced competitive pressure can be expected to reduce firms' incentives to invest in the development of new products. Where rivalry presents these features, the analysis also revolves around the sources of competitive pressure to which firms are subject. For instance, a merger between two pharmaceutical companies is a source of concerns if the merging parties are the only ones working on the development of a drug.³⁰ Similarly, an agreement is likely to be contrary to Article 101(1) TFEU if it brings together the only two credible research and development poles directed towards the development of a particular product.³¹

²⁸ Commission Decision of 13 May 2009 relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement (COMP/C-3/37990 – *Intel*) [2009] OJ C227/13, paras 1597-1616.

²⁹ Decision of 26 July 2012 declaring a concentration to be compatible with the internal market and the EEA (Case COMP/M.6410 – *UTC/Goodrich*), paras 417-421.

³⁰ See for instance Decision of 28 January 2015 pursuant to Article 6(1)(b) in conjunction with Article 6(2) of Council Regulation No 139/2004 (Case No COMP/M.7275 – *Novartis/GlaxoSmithKline Oncology Business*).

³¹ Guidelines on horizontal co-operation agreements [2010] OJ C1/1, paras 119-122.

In the current state of EU competition law, there does not seem to be anything inherently controversial in the introduction of innovation considerations in the way described above. As is true of other parameters of competition, direct evidence of harm to innovation is not a determinant aspect in the outcome of a case. The reduced competitive pressure resulting from the exclusion of a rival – in *Intel* – or from the creation of a lasting near monopoly – in *UTC/Goodrich* – would be sufficient to establish an infringement and to take remedial action. The conclusions are not different when innovation is the only (or the most relevant) relevant parameter of competition. In this sense, the assessment of the effects of a merger between pharmaceutical companies mentioned above is not fundamentally different from the acquisition of Aer Lingus by Ryanair.

These conclusions are in line with a GC judgment concerning the challenge brought by Deutsche Börse against a decision blocking a merger between that company and NYSE Euronext.³² Inter alia, Deutsche Börse claimed in its application for annulment that the Commission's finding that the operation would reduce innovation was 'manifestly incorrect and unsubstantiated'.³³ The GC rejected claims that the Commission had not established the impact of the merger on innovation. As in *Ryanair/Aer Lingus*, it seemed satisfied with evidence showing that the transaction would have entailed the loss of the 'unique and intensive' competitive pressure between the merging parties in 'technology, process and market design'.³⁴

In spite of the above, the introduction of innovation considerations has met with controversy. The idea that there is a link between market structures and innovation (and thus that the latter can be inferred by proxy from the former) has been contested on theoretical and empirical grounds by economists. Some commentators, in particular in the US, have advanced the idea that a reduction in competitive pressure cannot be presumed to harm innovation. As a consequence, the conclusions that are drawn, by proxy, for prices and output cannot be extended to this specific parameter of competition. The proposition that increased market concentration (and thus presumably reduced competitive pressure) is not necessarily inimical with the process of innovation is generally traced back to Schumpeter. This author speculated that the big industrial conglomerates that were seen with concern at the time (1940s) were the driving forces behind the process of technological change that had greatly improved the lives of ordinary citizens in the preceding decades.³⁵ In addition, it has become commonplace to

³² *Deutsche Börse AG v European Commission* (T-175/12) [2015] EU:T:2015:148.

³³ Ibid., para 171.

³⁴ Ibid., paras 173 and 176.

³⁵ See Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper Perennial, 2008). This author argued that big business 'has come to be the most powerful engine of [economic] progress and in particular of the long-run expansion of total output not only in spite of, but to a considerable extent through, this strategy'.

refer to a study by Gilbert, who did not find conclusive evidence of a link between increased competition and firms' incentives to innovate.³⁶

It is not obvious to see the relevance of this research in the context of EU competition law. As already explained, all of the cases discussed above could have been decided in the same way without any reference to innovation considerations, which were essentially introduced to illustrate the nature and operation of competition on the relevant market(s) affected by the practice. For as long as EU competition law analysis continues to revolve around the analysis of the relevant market and the observable constraints at the time of intervention, arguments pointing to the absence of a link between the degree of market concentration and the rate of innovation have a limited role to play in the analysis. Such arguments contradict the very logic of contemporary enforcement insofar as they suggest that reduced competitive pressure is not in itself an issue of concern. To the extent that they do, they are not parameter-specific. These arguments could also be used to question the way in which the impact of a practice on other parameters of competition is inferred by proxy. One could also argue, for instance, that there is no reason to presume a link between competitive pressure and product quality.³⁷

Once an authority (or a court) shows to the requisite legal standard that a firm would not be subject to effective constraints as a result of the practice, it is not a valid defence to argue that the link between competitive pressure and innovation is insufficiently robust. If a *prima facie* infringement is established, the burden of proof is reversed, and it is for the company to show that the practice would be on the whole pro-competitive in the specific context in which it is implemented. Thus, remedial action can only be avoided in such a case if a firm is in a position to show that the rate of innovation can be expected to increase as a result of the practice and that this increase is likely to outweigh any negative effects resulting from the loss of competitive pressure.

In the EU competition law system, firms are able to put forward a defence in cases where a *prima facie* infringement has been established. It is an integral feature of the system, and applies across provisions.³⁸ Nothing in the letter of primary or secondary legislation suggests that there is no room for innovation-related claims, the robustness and relevance of which have been considered in

³⁶ Richard Gilbert, 'Looking for Mr. Schumpeter: Where Are We in the Competition-Innovation Debate', in Adam B. Jaffe, Josh Lerner and Scott Stern (eds), *Innovation Policy and the Economy*, vol 6 (Cambridge, MA: MIT Press, 2006), p.159.

³⁷ On this question, see OECD, 'The Role and Measurement of Quality in Competition Analysis DAF/COMP(2013)17' and Maurice E. Stucke and Ariel Ezrachi, 'The Curious Case of Competition and Quality' (2015) 2 *Journal of Antitrust Enforcement* 227.

³⁸ In relation to agreements, it is possible for the parties to claim that the conditions set out in Article 101(3) TFEU are fulfilled. See in this sense Article 101(3) Guidelines [2004] OJ C101/27. In the context of Article 102 TFEU, a dominant firm is entitled to bring forward an 'objective justification' to escape the prohibition. See in this sense *Post Danmark I* [2012] EU:C:2012:172, paras 40-43. As far as merger control is concerned, the possibility is acknowledged in Horizontal Merger Guidelines [2004] OJ C31/5, paras 76-88 and Non-Horizontal Merger Guidelines [2008] OJ C265/6, paras 52-57, 77 and 115-118.

some cases.³⁹ This fact does not mean, however, that a defence is easy or likely to succeed in practice. Efficiency claims have to be verifiable and directly related to the practice under consideration if they are to be accepted. Generic claims about the implausibility of a link between competition and innovation, or an argument based on the idea that an increase in market concentration is unlikely to reduce the rate of innovation, would not be sufficient to escape a prohibition.

It is always a challenge for firms to show that a practice is a verifiable source of efficiency gains. The challenge is particularly acute when innovation considerations are at stake. By its very nature, it is a forward-looking and uncertain process. It seems difficult to quantify with precision the increase in the rate of innovation that would result from a given practice, and to show that a causal link exists between the two. As a consequence, it is not surprising that innovation-related claims have been consistently rejected by the Commission. In *Glaxo Spain* (concerning Article 101 TFEU), the pharmaceutical company sought to argue that an agreement aimed at limiting parallel trade between Member States would be on the whole pro-competitive insofar as it would allow it to price discriminate between regions and thus to devote greater resources to research and development activities. Even though the ECJ accepted the principle that a defence should be available under Article 101(3) TFEU and that the Commission must not summarily dismiss arguments in this sense,⁴⁰ it is difficult to see how it would be possible to substantiate the claim that the increased resources resulting from parallel trade restrictions would result in an increase in the innovation efforts of the company. These are the arguments advanced by the Commission in the original decision.⁴¹

In *Microsoft*, the firm argued that an obligation to supply interoperability information to its rivals would have a negative impact on its incentives to innovate. This conclusion was, according to Microsoft, the necessary consequence of the fact that the information in question had involved substantial investments in research and development that have received intellectual property protection. If the purpose of intellectual property is to reward creative and innovative efforts, the firm claimed, an obligation to share protected information decreases by definition a firm's incentive to engage in such efforts. The GC agreed with the analysis of the Commission, which dismissed the arguments advanced by Microsoft. According to the GC, the gains claimed by the firm were 'vague,

³⁹ In fact, it seems clear from the relevant instruments issued by the Commission that innovation-related efficiencies may be invoked by the parties to an agreement or to a merger. See in this sense Horizontal Merger Guidelines [2004] OJ C31/5, para 81; and Article 101(3) Guidelines [2004] OJ C101/27, paras 70-71.

⁴⁰ *Glaxo Spain* [2009] ECR I-9291, paras 78-88.

⁴¹ Decision of 8 May 2001 relating to a proceeding pursuant to Article 81 of the EC Treaty (IV/36957/F3 – *Glaxo Wellcome*; IV/36997/F3 – *Aseprofar and Fedifar*; IV/37121/F3 – *Spain Pharma*; IV/37138/F3 – *BAI*; IV/37380/F3 – *EAEPIC*) [2001] OJ L302/1, paras 155-169. The Commission has not adopted a new decision following the ECJ ruling in *Glaxo Spain*, and has rejected a complaint prompting it to take action. See Decision of 27 May 2014 (COMP/AT.36957 – *Glaxo Wellcome*). The rejection decision has been challenged before the GC. See *European Association of Euro Pharmaceutical Companies v Commission* (T-574/14), pending.

general and theoretical’ and did not specify the products or technologies to which they referred.⁴² In *Western Digital Ireland/Viviti Technologies* (decided under Regulation 139/2004), the acquiring firm argued that, and the Commission examined whether, the pooling of research and development resources resulting from the merger ‘would lead to greater and faster product development’.⁴³ These claims were not accepted, due to being ‘rather general in nature’ and thus not verifiable.⁴⁴

3. DIRECT HARM TO INNOVATION AS A THEORY OF HARM

3.1. A DEPARTURE FROM THE LOGIC OF CONTEMPORARY ENFORCEMENT

For the purposes of this piece, the direct introduction of innovation considerations refers to a situation in which intervention is deemed justified not because harm to the competitive process has been established to the requisite legal standard, but because the practice is understood to have a negative impact on the rate of innovation. This is an instance, put differently, where the analysis shifts away from the competitive constraints faced by firms to focus directly on a particular parameter of competition. From the practice of the Commission, it is possible to identify two instances in which innovation considerations can be introduced in the analysis. The first instance is one in which such considerations are invoked to justify intervention in lieu of an assessment of the foreclosure effects of a practice. The second scenario is one in which innovation considerations are introduced in lieu of the condition requiring that a refusal to deal prevents the emergence of a new product for which there is potential consumer demand. The two instances are examined in turn.

3.1.1. *Innovation considerations in lieu of anticompetitive foreclosure*

As mentioned in the previous section, some practices are only prohibited under Articles 101 and 102 TFEU where they have – or are likely to have – an anticompetitive effect. In the context of merger control, a case-by-case analysis of the impact of the concentration is required across the board. In some cases – think of exclusive dealing under Articles 101, of a vertical merger under Regulation 139/2004, or of selective price cuts under Article 102 TFEU – the foreclosure of competitors is the concern justifying intervention. The notion of foreclosure generally refers to instances where the ability and incentive of rivals to operate on

⁴² *Microsoft Corp v Commission* (T-201/04) [2007] ECR II-3601, para 698.

⁴³ Commission Decision of 23 November 2011 declaring a concentration to be compatible with the internal market and the EEA agreement (COMP/M.6203 – *Western Digital Ireland/Viviti Technologies*), paras 1004-1007.

⁴⁴ *Ibid.*, paras 1004-1007.

the relevant market is reduced to such an extent that they no longer place an effective competitive constraint on the firm(s) implementing the practice. This is understood to be the case where the exclusion of competitors from the relevant market is a likely prospect.

What seems clear from the case law (and this is true of all provisions) is that, as a rule, intervention is not justified merely because there is evidence suggesting that rivals would be (or have been) placed at a relative disadvantage as a result of the practice. The threshold for intervention in such cases is typically higher than a mere difficulty to compete. In the context of Article 101 TFEU, the most detailed analysis of foreclosure concerns can be found in *Delimitis*.⁴⁵ By definition, exclusive dealing agreements place new entrants at a disadvantage. This fact alone is however not enough to establish a restriction of competition within the meaning of Article 101(1) TFEU. According to the Court in that case, to determine whether the cumulative effects of exclusive dealing agreements amount to a restriction of competition, it is necessary to consider their concrete impact on the ability of rival suppliers to access the market.⁴⁶

The same can be said of merger control. The fact that a vertical merger would give a competitive advantage to the new entity does not in itself justify remedial intervention. In the absence of anticompetitive foreclosure, the fact that rivals are disadvantaged following the merger may stimulate, rather than stifle, competition. As explained by the Commission in the Non-Horizontal Merger Guidelines, rivals may be in a position to develop counterstrategies to match the superior position achieved by the new entity.⁴⁷ In line with what has been discussed above, it would not be sufficient for the Commission to argue that the new entity would deny access to inputs or outlets to its rivals. It would be necessary to show, in addition, that the firm would not be subject to effective competitive constraints in the post-merger scenario.⁴⁸

Finally, Article 102 TFEU case law suggests that some practices are not deemed abusive merely because they place rivals at a disadvantage. The threshold justifying intervention is higher. This is nowhere as apparent as in relation to the case law on refusals to deal with competitors. For instance, in *Magill* and *IMS Health*, the Court explained that a refusal to license an intellectual property right is only abusive if the input to which access is requested is ‘indispensable’ to compete on a related, downstream market.⁴⁹ In the latter, it clarified that an input cannot be said to be indispensable if there are ‘alternative solutions, even if they are less

⁴⁵ *Delimitis* [1991] E.C.R. I-935.

⁴⁶ *Ibid.*, paras 19-26. See also, for an application of the test, *SLA 'Maxima Latvija' v Konkurences padome* (C-345/14) [2015] EU:C:2015:784.

⁴⁷ Non-Horizontal Merger Guidelines [2008] OJ C265/6, in particular paras 39, 67 and 103.

⁴⁸ *Ibid.*, paras 47-51; 72-75; and 111-113.

⁴⁹ *Radio Telefís Éireann (RTE) and Independent Television Publications Ltd (ITP) v Commission ('Magill')* (C-241/91 P and C-242/91 P) [1995] E.C.R. I-743 and *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* (C-418/01) [2004] E.C.R. I-5039.

advantageous'.⁵⁰ In other words, the fact that the dominant firm would enjoy a significant competitive advantage is insufficient to trigger the prohibition.

Subsequent rulings show that the same conclusion can be extended to other potentially exclusionary practices. A 'margin squeeze' is close in nature to a refusal to deal, in the sense that it relates to the conditions under which a vertically-integrated supplier gives access to its inputs to downstream rivals. In *Deutsche Telekom*, the Court held that this practice is not in itself prohibited, even if it places, by definition, the competitors of a dominant firm at a disadvantage. According to the relevant case law, this practice is only abusive within the meaning of Article 102 TFEU when it has an exclusionary effect. It is likely that the practice will have such an impact on competition where, for instance, the input supplied by the dominant firm is indispensable for rivals to operate in the relevant downstream market.⁵¹

The same can be said in relation to selective price cuts. It is undeniable that the application of targeted discounts aimed at attracting the customers of a rival places the latter at a disadvantage. Since *Post Danmark I*, this fact alone is insufficient to establish an exclusionary abuse. Above-cost selective price cuts by a dominant firm are not as such contrary to Article 102 TFEU. Equally efficient rivals are in principle in a position to match such a strategy without jeopardising their ability and incentive to compete in the long run.⁵² As a result, it would only be prohibited where an exclusionary effect can be shown or where it can be established to the requisite legal standard that the practice is part of a strategy aimed at the exclusion of a rival.⁵³

Innovation considerations can be introduced in an attempt to circumvent the applicable substantive standard. For instance, the Commission may attempt to argue that intervention in a given case is justified even though the practice under consideration is unlikely to exclude equally efficient rivals. The claim instead would be that it would harm the rivals' ability and incentive to innovate. This shift in focus of the analysis entails a move away from foreclosure towards the presumed impact of the practice on innovation. The way in which innovation considerations may be relied upon in such a context can be usefully illustrated by reference to the *Intel/McAfee* merger, decided by the Commission in 2011.⁵⁴ The transaction concerned the acquisition of an 'endpoint security' firm (McAfee) by Intel, the dominant firm on the market for microprocessors (with a share at least in excess of 70%).⁵⁵ The Commission accepted the commitments offered by Intel and cleared the operation in 'Phase I'.

⁵⁰ *IMS Health* [2004] E.C.R. I-5039, para 28.

⁵¹ *Deutsche Telekom* [2010] E.C.R. I-9555, paras 231-234. See also *TeliaSonera* [2011] E.C.R. I-527, paras 70-71.

⁵² *Post Danmark I* [2012] EU:C:2012:172, para 38.

⁵³ *Ibid.*, paras 27 and 40.

⁵⁴ Decision of 26 January 2011 (COMP/M.5984 – *Intel/McAfee*) [2011] OJ C98/1.

⁵⁵ *Ibid.*, paras 56-62.

The transaction gave the new entity a competitive advantage over rival security systems. In particular, it allowed for increased synergies and for the development of superior, improved products in which security could be directly embedded in the microprocessor.⁵⁶ Potentially, this outcome was as much a cause for concern as it was a source of more intense, livelier competition on the market in which McAfee operates. Irrespective of its effects, it is undeniable that, absent remedial action, the operation created an unlevel playing field that placed McAfee's rivals at a relative disadvantage. However, this fact alone cannot justify intervention. Absent evidence pointing to the ability and the incentive of the new entity to foreclose competition on the market for 'endpoint security', an unlevel playing field could stimulate rivalry and lead players to improve the quality of their services to the benefit of end-users.

Because the operation was decided in 'Phase I', no in-depth analysis of the ability and incentive of the new entity to foreclose competition was carried out. For the purposes of this article, it is sufficient to note that there were several factors casting doubts about the likelihood of foreclosure. The FTC, which assessed it in parallel, did not raise any objections to the operation.⁵⁷ The market for 'endpoint security', where McAfee sold its products, remained relatively unconcentrated⁵⁸ (the market share of the leader was between 30 and 40%; McAfee's share as the second largest firm was under 20%) and, even more crucially, was characterised by rapid innovation.⁵⁹ Interestingly, McAfee's rivals expressed concern about the fact that the operation could lead to lower prices for end-users, in part as a result of the increased competitive pressure and in part as a result of the launch of a superior, integrated product.⁶⁰

It is in a context like this one that innovation considerations can be introduced in lieu of anticompetitive foreclosure. In a case where evidence of the latter is insufficiently robust, and innovation is a key driver of competition, an authority or a claimant may attempt to argue that, irrespective of the likelihood of exclusionary effects, remedial action is justified to preserve firms' incentives to innovate. In *Intel/McAfee*, the Commission echoed claims by some rivals on the market for 'endpoint security' whereby more intense competition from the integrated firm would reduce their profits (either because the merger would bring prices down or would allow McAfee to offer superior solutions) and thus their ability to invest in research and development activities.⁶¹ The idea behind this claim seems to be that, even absent foreclosure, the market structure existing prior to the operation was more conducive to innovation than the post-merger scenario, characterised by the competitive advantage enjoyed by McAfee over its rivals. The remedies offered by Intel reflect this idea. The operation was indeed cleared after

⁵⁶ Ibid., para 182.

⁵⁷ 'Intel Wins Approval for McAfee Acquisition From FTC' *Bloomberg* (New York City, 21 December 2010).

⁵⁸ *Intel/McAfee* [2011] OJ C98/1, paras 74-82.

⁵⁹ Ibid., paras 109-112.

⁶⁰ Ibid., paras 167 and 214-215.

⁶¹ Ibid., paras 213-217.

the firm agreed to create (or perpetuate) a level playing field between McAfee and its rivals.⁶² According to the Commission, ensuring that McAfee would not be able to exploit any competitive advantage deriving from its integration with Intel products was deemed essential to preserve the rate of innovation on the market for ‘endpoint security’.⁶³

The ongoing proceedings against Google further illustrate how innovation considerations could become an alternative to orthodox foreclosure analysis in practice. In April 2015, the Commission sent a statement of objections to the firm after coming to the preliminary conclusion that it had abused its dominant position by displaying more prominently, and treating more favourably, its comparison shopping service.⁶⁴ The memo issued by the authority in this context is interesting insofar as it suggests that the exclusion of competing services is not a precondition to take remedial action under Article 102 TFEU. The document expresses concerns about the fact that the practice may have a negative impact on rivals’ incentive to innovate. The position expressed in the memo suggests that the reduced incentives would not come from their exclusion from the market, but from the fact that their efforts to improve their services would not be rewarded in the form of a more prominent display in the search engine. Google’s own services, irrespective of their merits, would still benefit from preferential access.⁶⁵ As in *Intel/McAfee*, the Commission required the creation of a level playing field to put an end to the alleged infringement.

An aspect of the investigation that was eventually not included in the Statement of Objections sent to Google provides an additional example. During the years leading to the opening of formal proceedings against the company, the Commission repeatedly expressed concerns about the alleged ‘scraping’ of rival content by Google. Even though they are not part of the formal proceedings against the company, these concerns were still being investigated at the time of the completion of this piece.⁶⁶ The Commission has alleged that the firm used third party material without authorisation, and that this practice could amount to a breach of Article 102 TFEU. Vice-President Almunia never claimed in his public statements that this practice was problematic as a consequence of its likely

⁶² This expression is in fact expressly used twice by the Commission in the decision (paras 313 and 329).

⁶³ Ibid, para 342.

⁶⁴ ‘Antitrust: Commission sends Statement of Objections to Google on comparison shopping service’, MEMO/15/4781 (Brussels, 15 April 2015).

⁶⁵ Ibid.: ‘Google’s conduct has a negative impact on consumers and innovation. It means that users do not necessarily see the most relevant comparison shopping results in response to their queries, and that incentives to innovate from rivals are lowered as they know that however good their product, they will not benefit from the same prominence as Google’s product’.

⁶⁶ Ibid.: ‘The Commission continues its ongoing formal investigation under EU antitrust rules of other aspects of Google’s behaviour in the EEA, including the favourable treatment by Google in its general search results of other specialised search services, and concerns with regard to copying of rivals’ web content (known as “scraping”), advertising exclusivity and undue restrictions on advertisers’. See also Natalia Drozdak, ‘EU Deepens Antitrust Investigation Into Google’s Practices’ *Wall Street Journal* (New York City, 21 August 2015).

foreclosure effects. Instead, he expressed his concern about the fact that it could ‘reduce competitors’ incentives to invest in the creation of original content’.⁶⁷ Interestingly, this and other statements suggest that the alleged ‘scraping’ could amount to an abuse of a dominant position irrespective of whether it amounts to a breach of copyright. In this sense, they hint at the emergence of EU competition law as an autonomous tool for the promotion of innovation.

3.1.2. *Innovation considerations in lieu of the ‘new product’ condition*

It is well-established in EU competition law that a refusal to license an intellectual property right is not in itself abusive, even when the input in question is indispensable. In this sense, it is different from other practices discussed above such as ‘margin squeezes’⁶⁸ and selective price cuts. It is clear from the case law that, if a firm develops a technology that is far superior to that of rivals, it is in principle entitled to monopolise the market without violating Article 102 TFEU. The exclusion of rivals in such a case would generally be the necessary consequence of the development of a technology (generally protected, in turn, by a patent or a copyright). Such an outcome would, in addition, be compatible with the logic of competition law, which seeks to provide firms with the necessary incentives to outperform rivals by developing new products and improving existing ones. Requiring, as a matter of principle, firms to share their competitive advantages with rivals would have a negative impact on such incentives.⁶⁹ As a result, it is only in ‘exceptional circumstances’ that a refusal to license an intellectual property right amounts to an abuse of a dominant position.

For Article 102 TFEU to apply to refusal to license an intellectual property, it is necessary to establish that the right in question is indispensable to compete on a vertically-related market and that the refusal would prevent the emergence of a new product for which there is potential consumer demand.⁷⁰ In other words, the Court has required, since *Magill* and *IMS Health*, evidence that the practice leads to the elimination of a source of competitive pressure that is observable at the time when intervention is considered. This constraint must, in addition, bring substantial added value to consumers, in the sense that it must allow for the launch of ‘new goods or services not offered by the owner of the right’.⁷¹ By the same token, the refusal would not be abusive if the firm that requests a licence merely intends to duplicate the products already offered by the dominant firm on the downstream market.

⁶⁷ ‘Statement of VP Almunia on the Google antitrust investigation’ (Brussels, 21 May 2012) <http://europa.eu/rapid/press-release_SPEECH-12-372_en.htm>.

⁶⁸ This point was contentious in *TeliaSonera*, and the Court concluded that access to the relevant input need not be indispensable for a ‘margin squeeze’ to amount to an abuse. See *TeliaSonera* [2011] E.C.R. I-527, paras 47-59 and 60-70.

⁶⁹ See in this sense the analysis found in *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigenvertriebsgesellschaft mbH & Co. KG*. (C-7/97) [1998] E.C.R. I-7791, Opinion of AG Jacobs, para 57.

⁷⁰ *Magill* [1995] E.C.R. I-743 and *IMS Health* [2004] E.C.R. I-5039.

⁷¹ *IMS Health* [2004] E.C.R. I-5039, para 49.

The so-called ‘new product’ condition is very difficult to meet in practice. The choice of such a strict substantive standard by the Court is only natural considering that intervention under competition law to force a firm to deal with a rival contradicts the very mechanism (exclusive rights) through which intellectual property seeks to reward creative and inventive activities. Precisely because the legal test set in *Magill* and *IMS Health* is so difficult to establish, authorities and claimants may develop an incentive to circumvent it by introducing other considerations in the analysis. It is in this context that innovation-related arguments may come into play. Instead of showing that the practice prevents the launch of a new product that can be readily identified at the time when intervention is considered (which was the factual scenario at stake in *Magill*), an authority or a claimant may seek to show that the refusal (and the likely monopolisation of the downstream market by the dominant firm) leads to a reduction in the rate of innovation on the relevant market.

This is the background against which the 2004 Commission decision in *Microsoft* must be understood. The authority did not provide evidence that the practice prevented the emergence of a ‘new product’ for which there was separate demand, as required since *Magill* and *IMS Health*. Instead, the authority claimed that the refusal marginalised rivals’ products, thereby limiting access by consumers to their innovative features.⁷² Over the long run, the Commission assumed that the marginalisation of rivals would reduce the scope for innovation on the relevant market, virtually limiting it to innovations coming from Microsoft itself.⁷³ In essence, the authority concluded that innovation would be greater if the firm were required to provide interoperability information to its rivals. In its 2007 ruling, the GC confirmed the legality of this aspect of the decision, even though it examined it under the legal test laid down in *Magill* and *IMS Health*.⁷⁴ Following this judgment, the new, laxer, substantive standard is enshrined in the 2009 Guidance issued by the Commission. The authority now considers that a refusal to deal with a rival may be abusive not only where it prevents the emergence of an already developed product, but also where it is ‘likely’ to hinder (‘stifle’) follow-on innovation, that is, the future development of products building on the innovation for which a licence (or another form of access) is requested.⁷⁵

⁷² Decision of 24 March 2004 relating to a proceeding pursuant to Article 82 of the EC Treaty and Article 54 of the EEA Agreement against Microsoft Corporation (Case COMP/C-3/37.792 – *Microsoft*) [2007] OJ L32/3, in particular para 694.

⁷³ *Ibid.*, para 700.

⁷⁴ *Microsoft* [2007] E.C.R. II-3601, paras 312-336.

⁷⁵ 2009 Guidance [2009] OJ C45/7, para 87.

3.2. IMPLICATIONS OF THE DIRECT INTRODUCTION OF INNOVATION CONSIDERATIONS

It is submitted that there is no room for the direct introduction of innovation considerations in the analysis, at least in the current state of EU competition law. Three main reasons are offered in support of this conclusion. The first has to do with the standard of proof that an authority or a claimant would have to satisfy when arguing that a particular practice is harmful to the process of innovation. It is difficult to see how it would be possible to provide cogent and convincing evidence in this sense, in the same way that, as explained above, it would be difficult for firms to argue that their practice is on the whole pro-competitive because it would lead to increased innovation. The second reason has to do with the way in which the field engages with systems of property. EU competition law was not conceived as, as has never been, a device to fine-tune markets and achieve optimal outcomes. This idea is particularly well illustrated by reference to intellectual property regimes, to which the discipline is largely deferential. If it is accepted that, regardless of exclusionary concerns, EU competition law can be relied upon to re-shape markets, its relationship with systems of property would be altered in a fundamental way. Finally, it is submitted that the direct introduction of innovation considerations does not allow for the definition of workable boundaries on administrative action.

3.2.1. *Proving direct harm to innovation to the requisite legal standard*

It is plausible that, as claimed by the Commission in the 2009 Guidance, an obligation to license an intellectual property right leads to an increase in the rate of follow-on innovation. It is also plausible to claim that the creation of a level playing field, whereby all rivals have access to a given input on the same terms and conditions (as has been argued in the context of *Google* or *Intel/McAfee*), will have the same effect. The fundamental question in this regard is whether a theory of harm that is merely plausible is sufficient to justify intervention under EU competition law. An analysis of the relevant case law suggests that this is not the case. Plausibility, alone, would fall short of the requisite standard of proof. In *Tetra Laval*,⁷⁶ the ECJ emphasised that, when the analysis is prospective in nature, it is necessary ‘to envisage various chains of cause and effect with a view to ascertaining which of them are the most likely’.⁷⁷ This is the case, in particular, where ‘the chains of cause and effect are dimly discernible, uncertain and difficult to establish’.⁷⁸ This vocabulary seems to require evidence showing, at the very least, that the claims made by the Commission in support of its conclusions are more plausible than alternative claims.⁷⁹

⁷⁶ *Tetra Laval BV v Commission* (C-12/03 P) [2005] E.C.R. I-987.

⁷⁷ *Ibid*, para 43.

⁷⁸ *Ibid*, para 44.

⁷⁹ For a similar point in relation to US antitrust, see Douglas H. Ginsburg and Joshua D. Wright, ‘Dynamic Analysis and the Limits of Antitrust Institutions’ (2012) 78 *Antitrust Law Journal* 1.

Against this background, the problem that an authority or a claimant would face when making innovation-related claims is threefold. First, claiming that intervention will have a positive impact on innovation in the cases discussed above is certainly plausible, but claiming the opposite is also plausible. For instance (and going back to the issues discussed in light of *Intel/McAfee* and *Google*), one could argue convincingly – in contradiction with what the Commission suggested in these two cases – that, absent cogent and convincing evidence of anticompetitive foreclosure, the creation of a level playing field on a given market does not increase, and actually reduces, firms’ incentives to innovate. There is no empirical or theoretical support for the proposition that a level playing field invariably leads to greater innovation. Similarly, it is plausible that the rate of innovation would be greater if a firm were required to license its patent or its copyright. However, the opposite is also plausible. As the Commission itself has argued in the context of the *Google* investigation, preventing rivals from using the content produced by a firm can preserve the latter’s incentives to innovate. After all, intellectual property systems are based on that very idea. In light of *Tetra Laval*, the open question is whether the Commission would be in a position to provide evidence clarifying why protecting the appropriability of intangible assets or promoting rivalry instead would lead to greater innovation in the context of a particular case. This issue is explored in greater detail below.

Secondly, when arguments are made about the likely evolution of markets beyond the short run, it cannot simply be assumed that all features will remain unaltered except for those affected by the practice under consideration. The concerns that exist at a given point in time may dissipate as the markets evolve and change their shape and operation. There is certainly no shortage of examples showing that what look like entrenched monopolies in the short run can very quickly dissipate. Suffice it to think in this sense of the fate of Nokia, which looked like the undisputed leader on the market for mobile devices but whose position quickly became insignificant with the advent of smartphones.⁸⁰ For innovation considerations to be of direct relevance in the analysis, it would be necessary to show that the market is unlikely to evolve in a manner that addresses any concerns justifying intervention. Given the nature of innovation as a process, it is not easy to see how an authority or a claimant would ever be able to provide cogent and convincing evidence showing that the outcome supporting intervention is the most likely, as required in *Tetra Laval*. By definition, such an assessment would make it necessary to look beyond the observable features of the market at the time of intervention – that is, beyond the very features that define the usual boundaries of administrative action in EU competition law.

Finally, it would be necessary to take into account, before intervention is deemed justified, that remedial action has an impact on firms’ incentives to invest

⁸⁰ For an analysis of Nokia’s decline and fall, see Alexandra Chang, ‘5 Reasons Why Nokia Lost its Handset Sales Lead and Got Downgraded to “Junk”’ *Wired* (San Francisco, 27 April 2012).

and innovate. Creating a level playing field – which was the outcome of intervention in cases like *Microsoft* and *Intel/McAfee* – through EU competition law may have an effect on the nature and rate of innovation on the relevant market. As conceded in the 2009 Guidance, an obligation to deal may impact negatively on a dominant firm's level of innovation.⁸¹ It may also impact negatively on rivals' incentives to develop new products and improve existing ones. It has long been understood that an obligation to deal may have such effects. It may, *inter alia*, create the expectation that remedial intervention will address any competitive disadvantage faced by rivals.⁸²

Intervention may also alter the nature and scope of innovation. In order to overcome a competitive disadvantage, rivals may seek to develop a breakthrough innovation altering fundamentally the features of the relevant market (or the industry at large). By favouring incremental, or follow-on, innovation (that is, the progressive improvement of the products that would come from head-to-head rivalry), intervention under EU competition law may have an impact on firms' incentives to invest in such disruptive discoveries. For innovation considerations to be of direct relevance in the analysis, the authority or the claimant should be in a position to show why one form of innovation is to be preferred over the alternative, or why the rate of innovation will be higher in case follow-on innovation is favoured.⁸³ Again, it is difficult to see how convincing evidence in this sense could be provided in the context of a particular case.

In a different vein, a plausibility standard is problematic insofar as it creates an asymmetry between the authority or claimant, on the one hand, and the firm(s), on the other. This imbalance would be difficult to justify. It has been explained above that firms are very unlikely to succeed in their claims that a practice that reduces competitive pressure is on the whole pro-competitive insofar as it leads to increased innovation. This is the consequence, first and foremost, of the requirement that any efficiency gains be verifiable for them to be accepted. Firms are, put differently, subject to a standard that is higher than one of plausibility. If this is so, it is difficult to see why authorities or claimants would demand a standard from firms that they themselves would be unable to meet when they make innovation-related claims. Similarly, it is not obvious to see why plausibility would be acceptable to justify intervention but not to rule out the need for it.

3.2.2. *Innovation considerations and systems of property*

There is something tautological in stating that a refusal to license an intellectual property right is abusive insofar as it harms follow-on innovation. If a firm is required to share its intangible assets, it is by definition the case that consumers

⁸¹ 2009 Guidance [2009] OJ C45/7, para 90.

⁸² This is an issue discussed by Justice Scalia in *Trinko*. *Verizon Communications v Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004). For an analysis of this question in the telecommunications industry, see Robert W. Crandall, *Competition and Chaos: U.S. Telecommunications since the 1996 Telecom Act* (Washington DC: Brookings Institution Press, 2005).

⁸³ This argument is developed in Pierre Larouche, 'The European *Microsoft* case at the Crossroads of Competition Policy and Innovation' (2009) 75 *Antitrust Law Journal* 601.

will benefit from greater choice. Remedial action will give the opportunity to new entrants to add features responding to consumer demand. If a legal test based on this idea is problematic, this is due to the fact that it lays down a condition that would always be satisfied. It is difficult to see how an authority or a claimant would ever fail to show in a particular case that increased follow-on innovation would be a *plausible* outcome of intervention. An intellectual property right could in fact be accurately described as an exclusive right to authorise or prohibit market entry and thus follow-on innovation. In this sense, the approach enshrined in the 2009 Guidance could be criticised insofar as it turned the necessary and expected consequences of the operation of an intellectual property regime (or, in general, of the operation of a system of property) into an element of a legal test. The mechanism through which copyright and patent law provide incentives to innovate is presented by the Commission as the very concern justifying intervention.

It is conventional wisdom that the award of exclusive rights to reward inventive and creative activities leads by definition to *ex post* inefficiency. It cannot be emphasised enough that this is not an overlooked aspect or an unintended effect of an intellectual property regime. The question has never been whether greater competition and increased follow-on innovation can be created by means of a compulsory licence or a compulsory access obligation. It has long been understood that the issue is whether, *ex ante*, a firm would have had the necessary incentives to develop a new product (or, as far as physical property is concerned, to build a facility).⁸⁴ Any *ex post* outcomes, admittedly inefficiency-inducing, are deemed to be compensated by the increased appropriability of investments that results from the award of exclusive rights. Claiming that there is something anticompetitive in systems based on the award of exclusive rights is tantamount to second-guessing them, in the sense that it suggests that greater competition and weaker appropriability are conducive to increased innovation. It hints, in this sense, at the endorsement of an alternative approach to the promotion of innovation through competition law.⁸⁵

Advancing, via EU competition law enforcement, an approach to innovation that contradicts the logic of intellectual property (or, more generally, in a way that questions systems of property in general) is problematic. This is so not only because it could be used to undermine intellectual property regimes via targeted enforcement, but because it is at odds with the nature and logic of EU competition law itself. The latter is not, and has never been, a device to fine-tune

⁸⁴ For an extensive discussion of this well-established idea, see Einer Elhauge, 'Defining Better Monopolization Standards' (2003) 56 Stanford Law Review 253.

⁸⁵ Some authors have openly advocated a form of second-guessing via competition law intervention to remedy the flaws of intellectual property regimes. See in particular Mark A Lemley, 'Industry-Specific Antitrust Policy for Innovation' (2011) Columbia Business Law Review 637 and Tim Wu, 'Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most' (2012) 78 Antitrust Law Journal 313.

markets via top-down planning.⁸⁶ The point of remedial action is to preserve the competitive constraints to which firms are subject, not to achieve optimal market outcomes. EU competition law tolerates inefficiency. For instance, dominant positions – even monopolies – are not prohibited as such under Article 102 TFEU. Only their abuse – in particular, where it leads to reduced competitive pressure through exclusion – is prohibited. The purpose of intervention, in other words, is not to undermine the position of the dominant player but to ensure that that the limited degree of competition is not further weakened.⁸⁷ Similarly, coordinated behaviour that is not the result of an agreement or a concerted practice but of the features and operation of the relevant market is not caught by Article 101 TFEU.⁸⁸

The principle whereby EU competition law is not a tool of market fine-tuning is reflected in the well-established case law according to which competition law does not dispute the existence of intellectual property rights, but only their exercise.⁸⁹ The *Magill* and *IMS Health* line of case law is consistent with this principle. As already explained, the ‘new product’ condition is a valuable safeguard to ensure that the enforcement of Article 102 TFEU does not simply amount to second-guessing the logic of intellectual property. Subsequent case law, and in particular *Huawei*, is also compatible with this view.⁹⁰ On the other hand, administrative action that is based on the idea that the exercise of a patent or a copyright limits follow-on innovation amounts to disputing, for all practical purposes, the very existence of the right.

3.2.3. *Administrative discretion and predictability*

It transpires from the above that the direct introduction of innovation considerations would not make it possible to meaningfully constrain the discretion of an authority. Where intervention is based on a legal condition that is merely plausible – and that would seemingly always be satisfied as a result – it is difficult

⁸⁶ See in this sense *Éditions Odile Jacob SAS v Commission* (C-551/10 P) [2012] EU:C:2012:681, para 67 ([i]t is [...] not the duty of the Commission, as the appellant would suggest, to establish a perfect competition system and to decide, in place of the economic actors, who should operate on the market’). This point can also be found in Wouter P.J. Wils, ‘The judgment of the EU General Court in Intel and the so-called ‘more economic approach’ to abuse of dominance’ (2014) 37 World Competition 405.

⁸⁷ *Post Danmark A/S v Konkurrencerådet (Post Danmark II)* (C-23/14) [2015] EU:C:2015:651, paras 70 and 72.

⁸⁸ *A. Ahlström Osakeyhtiö and others v Commission (Wood Pulp II)* (C-89/85, C-104/85, C-114/85, C-116/85, C-117/85 and C-125/85 to C-129/85) [1993] E.C.R. I- 1307.

⁸⁹ *Établissements Consten S.à.R.L. and Gründig-Verkaufs-GmbH v Commission (Consten-Gründig)* (56/64 and 58/64) [1966] E.C.R. 429.

⁹⁰ *Huawei Technologies Co. Ltd v ZTE Corp. and ZTE Deutschland GmbH* (C-170/13) [2015] EU:C:2015:477. In this case, the Court ruled that the exercise of an intellectual property right (and more precisely the use of an injunction against a rival) can amount to an abuse of dominance in circumstances that differ from those set out in *Magill* and *IMS Health*. The ruling is consistent with the nature and logic of EU competition law as described above. The Court concluded that the exercise of an intellectual property right may violate Article 102 TFEU when the relevant technology has been included in a standard and the patent holder has pledged to license it to third parties on fair, reasonable, and non-discriminatory terms. As the facts of the case show, the use of an injunction in such a context can have an impact on the competitive constraints faced by a firm, as it may lead to the exclusion of a rival using the technology in question.

to see how administrative action can be challenged.⁹¹ This is so, in particular, where there is an asymmetry between the standards to which an authority and a firm are subject. For the same reasons, judicial review would hardly be effective. Administrative action can only be controlled by courts when it is assessed against an operational benchmark. There is an aspect of *Microsoft* ruling that is often overlooked and is relevant in this regard. The GC did not examine whether the Commission had laid down a legal condition fulfilling such requirements. It simply noted that the Commission had argued that Microsoft's conduct limited technical development and that its findings were not 'manifestly incorrect'.⁹² Because the GC did not exercise full review over this aspect of the decision (as it is required to do under Article 263 TFEU⁹³), it did not examine the nature and reliability of the test set by the Commission.

Another question that transpires from the above discussion is that competing claims about the process of innovation can be made to support mutually contradictory positions. One can validly argue that reduced appropriability and increased competition will lead to an increase in the rate of innovation, as the Commission did in *Microsoft*. But one can argue the opposite, as it has suggested in the context of the *Google* investigation. As a result, a firm can be required to supply its information to rivals, as in the former, or can be precluded from using rivals' content (and this irrespective of whether it would amount to a copyright infringement).

The approach at which the Commission has hinted suggests that it would be for a competition authority to decide, on a case-by-case basis, whether innovation would be fostered by preserving the appropriability of the intangible asset or by increasing competition instead. As already explained, whether or not there is intellectual property protection would not be a decisive aspect in this regard. Administrative action could interfere with an intellectual property right or could, by contrast, extend protection to information that is in the public domain. Intervention may not be obvious to anticipate if it can be on mutually conflicting – but plausible – views about the process of innovation. The outcome sought by means of remedial action in one case may be the very concern justifying intervention in another one. Such an understanding of EU competition law is difficult to accept. This is so not only because it would amount to the creation of a parallel regime for the promotion of innovation. Unless the authority is in a position to explain convincingly what may justify favouring over the other in the context of a particular case (and to provide ex ante guidance on its approach to enforcement), such form of market fine-tuning could come close to arbitrary decision-making.

⁹¹ This point is made in Ginsburg and Wright, 'Dynamic Analysis and the Limits of Antitrust Institutions' (2012) 78 Antitrust Law Journal 1.

⁹² *Microsoft* [2007] E.C.R. II-3601, para 665.

⁹³ For an overview of these questions, see Chapter 15 of Paul Craig, *EU Administrative Law* (2nd, Oxford: Oxford University Press, 2012).

4. CONCLUSIONS

Considerable efforts have been devoted over the past decade to make EU competition law enforcement more robust and predictable. In spite of the growing importance of innovation, the Commission has not yet attempted to develop a similar systematic understanding of the role of this parameter of competition, or to study the challenges to which it may give rise in practice. This paper identifies the various ways in which innovation considerations may be introduced in the analysis and to discuss the implications of relying upon them to justify intervention. There is a sense in which the introduction of innovation considerations seems uneventful. References to innovation are sometimes found in cases where the Commission has established to the requisite legal standard that a given practice harms the competitive process. In such cases, innovation considerations have sometimes been introduced to illustrate the likely consequences of reduced competitive pressure. This fact does not mean, however, that intervention depends on evidence of harm to innovation, or that a firm can escape remedial action by showing that the effects of a practice on innovation have not been established. The ruling of the GC in *Deutsche Börse/NYSE Euronext* seems clear in this regard.

On the other hand, the findings of this paper suggest that innovation considerations may be introduced in some cases as an alternative substantive standard. Instead of showing that a given practice harms the competitive process, an authority or a claimant may seek to argue that it is likely to impact negatively on the rate of innovation on the relevant market. If one takes the ongoing proceedings against Google as an example, it appears that administrative action in a case could be justified not because of the likely exclusionary effects of the practice, but because of its impact on rivals' incentives to invest in the improvement of their services. Similarly, innovation considerations may be introduced in lieu of the 'new product' condition that the Court required to establish that a refusal to license an intellectual property right is abusive under Article 102 TFEU. It has been explained that, following *Microsoft*, the Commission is now of the view that such a refusal can be abusive if it can be shown that it harms follow-on innovation.

The direct introduction of innovation considerations alters the nature of EU competition law enforcement. There is a difference between preserving the sources of competitive pressure faced by firms, and fine-tuning markets to promote innovation. This shift could be problematic. Establishing harm to the competitive process in light of the observable features of the relevant market (that is, the approach around which contemporary enforcement revolves) cannot be compared with speculating about its likely evolution beyond the short run. Where intervention is based on the latter, it is difficult to see how an authority or a claimant would be able to provide cogent and convincing evidence of harm to innovation. In addition, administrative action would not be subject to effective

constraints and as such may not be obvious to anticipate. This is so, in particular, because protection by means of intellectual property (and, more generally, the operation of property systems) leads by definition to *ex post* inefficiency and reduced rivalry. As a result, intervention would be grounded on the very mechanism that is used to reward creative and inventive activities.