New Rules for Dominant Firms in Europe
Mattias Ganslandt
NEW RULES FOR DOMINANT FIRMS IN EUROPE

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“Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market insofar as it may affect trade between Member States.” (Article 82)

“If an economist finds something—a business practice of one sort or another—that he does not understand, he looks for a monopoly explanation” (Ronald Coase, 1972, p. 67)

1. Why do we need a modernization of Article 82?

The Commission has initiated a discussion about the application of the European competition rules for dominant firms. It recently published a Staff Discussion Paper which outlines some basic principles and raises a number of important questions, in particular related to the assessment of “exclusionary practices”.

It is useful to start the discussion with the motives for a reform. One motive is that a different approach to Article 82 can improve economic efficiency. Another is that a
modernization of the Commission’s application of Article 82 can increase regulatory predictability and facilitate for European firms to determine whether certain business strategies are legal or not.\textsuperscript{8}

A pure economic approach to Article 82 would improve efficiency and contribute to a clarification of the principles and methods applied by the Commission in its assessment of firm behavior in concentrated markets.\textsuperscript{9}

1.1. Efficiency

The most important argument for a modernization of the application of Article 82 is that it can foster innovation and efficiency. The main contribution of competition is not static efficiency but rather long-run dynamic efficiency and growth.

William J Baumol is one of the most prominent advocates of this view: “The static efficiency properties that are stressed by standard welfare economics are emphatically not the most important qualities of capitalist economies. Rather, what is clear to historians and laypersons alike is that capitalism is unique in the extraordinary growth record it has been able to achieve; in its recurring industrial revolutions that have produced an outpouring of material wealth unlike anything previously seen in human history. The answer I propose here is that in key parts of the economy the prime weapon of competition is not price but innovation.”\textsuperscript{10}

\textsuperscript{7} The purpose of the current review of Article 82 is according to Commissioner Neelie Kroes “to ensure that the EU’s powers to intervene against monopoly abuses are applied consistently and effectively, not only by the Commission but also by national competition agencies and courts throughout the EU which also now apply EU competition law,” IP/05/1626, Brussels, 19th December 2005.

\textsuperscript{8} It should be noted in this context that material changes to Article 82 only to limited extent can be made by the Commission. The text of the law (Article 82 of the Treaty) is ultimately an issue for the legislature, while case-law is established by the courts. The Commissions application of Article 82, nevertheless, has an effect in practice and, in addition, an influence on the evolution of case-law in the long run.

\textsuperscript{9} Establishing a new approach to problems in competition law through guidelines that ultimately has a material impact is not a new phenomenon. The Commission’s Notice on the Definition of the Relevant Market is one important example, see http://europa.eu.int/comm/competition/antitrust/relevma_en.html.

It follows that it is in the long-run interest for consumers and producers in Europe that Article 82 is carefully applied so that dynamic incentives are not reduced.

The tension between regulation of the profit-maximizing behavior of dominant firms, on the one hand, and the dynamic incentives, on the other, is problematic for several reasons. Antitrust intervention that reduces the profitability of dominant firms or protect competitors in the static interest of consumers may have negative effects in the long run.

First, firms achieve competitive advantages through economies of scale and scope, which result in market concentration and sometimes dominance. Positive network effects on the demand- and the supply-side tend to reinforce this effect.11 These efficiencies generally benefit consumers in the long run.

Second, companies innovate and differentiate their products in order to get market power and to temporarily reduce competitive pressure.12 This process is, however, important for consumer welfare. The incentive to introduce novel goods, a greater variety of products and a gradual improvement of quality may be strategic in the short run, but efficiency-enhancing in the long run.13

Third, market integration and liberalization can potentially result in competition and more efficient production.14 Exit and elimination of inefficient firms is a key element in the

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13 A recent paper by Amil Petrin supports "a story in which large improvements in consumers' standard of living arise from competition as firms cannibalize each other's profits by seeking new goods that give them some temporary market power.", Quantifying the Benefits of New Products: The Case of the Minivan, Journal of Political Economy v110, n4 (August 2002): 705-29
rationalization of production and, ultimately, important for efficiency and growth in Europe.

It should also be noted that firms with significant market power generally have incentives to choose efficient actions; to minimize costs, to exploit growth opportunities and to deliver consumer satisfaction. In some cases they may also have strategic motives to reduce competition. Nevertheless, similar actions can have very different effects depending on the circumstances.

A formalistic approach to Article 82 – i.e. rigid per se rules – will likely, for all of the above reasons, reduce the incentives to strive for dominance and could also hinder the process of rationalization. The main argument for a modernization of the approach to Article 82 is, consequently, that it could enhance efficiency and growth.

1.2. International convergence

A second argument for a modernization of the application of Article 82 is that it can contribute to international convergence, in particular across the Atlantic. It should

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19 “The identification of exclusionary behaviour is one of the most difficult topics in competition policy, as often exclusionary practices cannot be distinguished from competitive actions that benefit consumers,” Massimo Motta, Competition Policy: Theory and Practice, Cambridge: Cambridge University Press, 2004, p 411.
20 Differences between the U.S. and Commission authorities have emerged in several important cases in recent years, including the Boeing/McDonnell Douglas, GE/Honeywell and Microsoft cases. The tendency for international convergence, nevertheless, seems to dominate occasional disagreements. Terry Calvani writes “Truth be told, conflict will never completely disappear. The United States itself has achieved a broad-based consensus on substantive antitrust, yet U.S. courts often find themselves in disagreement when
however be stressed that while this could happen, it is not clear that it must. \(^{21}\)  

Transatlantic convergence is consequently a possible but not inevitable outcome of a modernization of Article 82.  

It is true that American competition policy is focused on effects, rather than form. It is also correct that economics often play a central role in US antitrust. An economic approach to Article 82 would, naturally, introduce the same type of analysis in Europe.  

However, the economic approach is not in itself a guarantee for transatlantic convergence in the application of rules for dominant firms. \(^{22}\)  

The main reason for this is that an effects-based approach to abuse of dominance and monopolization is best described as a combination of method and substance.  

Economics provide tools for consistent and transparent analysis, but the results of the analysis depend crucially on the assumptions and the models used. \(^{23}\)  

If the US and European authorities start with different assumptions and different models, the application of competition rules for dominant firms – regarding for instance bundling, rebates or exclusive territories – would be fundamentally different under the two jurisdictions. \(^{24}\)  

interpreting the very same statutory language. The point is that conflict, while not eliminated, is much less common,” September 6, 2004, Downloaded from http://www.ftc.gov/ftc/history/docs/0409calvani.pdf  

\(^{21}\) Lack of convergence has been pointed out by several commentators. See for instance the speech by Michael A. Salinger, the Director of the Bureau of Economics, Federal Trade Commission, at the George Mason University Fall 2005 Antitrust Symposium Washington, DC September 20, 2005, “Can economics bridge the Atlantic? Monopolization under Section 2, Dominance under Article 82, and Fouls in Football,” Downloaded from http://www.ftc.gov/speeches/salinger/050920antitrustsymposium.pdf  

\(^{22}\) It is interesting to note that there is considerable transatlantic disagreement regarding Microsoft’s conduct despite the (relatively unique) economic approach taken by the Commission in the ongoing case against Microsoft. \(^{25}\)  

Michael A. Salinger notes that “Even if we can agree on the objective function and on the use of economic models to ensure logical consistency to our cases, there is no guarantee of convergence. If we use different models, we will get different results,” speech available from the Federal Trade Commission’s webpage http://www.ftc.gov/speeches/salinger/050920antitrustsymposium.pdf  

\(^{24}\) R. Hewitt Pate, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, has argued that “unilateral conduct remains the area of greatest separation between the general approaches of the U.S. and the EU. At the broadest level, we in the United States might be said - in words suggested by Judge Posner at a recent Antitrust Division event - to have a more Darwinian view of the competitive process. Over here, as a DG-Comp economist has put it during the same program, there is a greater emphasis on
More importantly, one may argue that rules for dominant firms could play a slightly different role in the European economy compared to the US for two fundamental reasons; it may foster market integration\textsuperscript{25} and it may protect and support competition in recently liberalized markets\textsuperscript{26}.

Both methodological and material factors suggest that a modernization does not necessarily result in transatlantic convergence. To the extent that it is consistent with the more fundamental efficiency-enhancing motives discussed above it may, nevertheless, be a positive and welcome by-product of a material reform in the long run (reducing both political friction and commercial uncertainty).

1.3. Symmetry

An economic approach to merger control\textsuperscript{27} and an economic approach to agreements\textsuperscript{28} have previously been introduced and implemented by the Commission. The modernization of Article 82 is the third step in this ongoing process\textsuperscript{29}.

It could be argued that an effects-based analysis under Article 82 would be symmetric and consistent with the same type of analysis that is nowadays applied to mergers and acquisitions under the EC merger regulation\textsuperscript{30} or agreements under Article 81.\textsuperscript{31} The

\textsuperscript{25} Richard Whish writes that EC “competition law plays a hugely important part in the overriding goal of achieving single market integration”, Competition Law, 5\textsuperscript{th} edition, LexisNexis UK, 2003, p 21 citing Ehlermann, C-D: “The contribution of EC competition policy to the single market”, CMLR 1992
\textsuperscript{27} Merger review, http://europa.eu.int/comm/competition/mergers/review/
\textsuperscript{28} Modernisation of EU Antitrust rules: Application of Art. 81(3) TEC
\textsuperscript{29} See http://europa.eu.int/comm/competition/antitrust/others/article_82_review.html
\textsuperscript{31} Guidelines on the application of Article 81(3) of the Treaty, Official Journal C 101, 27.04.2004, pages 97-118
ultimate question of illegality in a particular case is determined by market-power effects and possible off-setting efficiencies.\textsuperscript{32}

It is natural to use the same motivation for modernization of Article 82 as for the European merger control and the application of Article 81. The efficiency-arguments for reform apply to all areas of competition law.

2. An economic approach to Article 82

An economic approach focuses on the anti-competitive effects of a dominant firm’s conduct, while a formalistic approach focuses on the form of conduct under investigation.\textsuperscript{33} The former has several advantages over the latter.

The first advantage with an economic approach is that it recognizes that many forms of conduct can be either pro-competitive or anti-competitive.\textsuperscript{34} The effects depend on the circumstances. An economic analysis of the facts and market conditions potentially makes it possible to distinguish “use” from “abuse” of dominance and to answer the following important question: Is there an anti-competitive effect of a dominant firm’s conduct and, if so, how significant is it?

An affirmative answer to this question is a reasonable necessary condition for antitrust intervention in a specific case. At the same time one can argue that it is not sufficient. First and foremost, market power is rarely persistent and tends to vanish in the long-run. The market therefore generally corrects inefficiencies without regulatory support. Second


\textsuperscript{33} The Director of the Bureau of Economics at the Federal Trade Commission argues that “An economic approach to a Section 2 case or, for that matter, any antitrust case, means that we state the theory of the case in terms of a model... it forces the analyst to be specific about what harm means. When modeled, the principle that antitrust is to protect competition means that “harm” must be an increase in price or, in a more complex setting, a decrease in consumer welfare.”, speech downloaded from http://www.ftc.gov/speeches/salinger/050920antitrustsymposium.pdf

and equally important, regulatory decisions are taken with incomplete information and therefore associated with possible economic costs *ex post*.\(^{35}\) Third, antitrust remedies involve direct and indirect implementation costs. Fourth, intervention can result in production inefficiencies and a loss of total social surplus, in particular if too much weight is put on static consumer welfare.\(^{36}\)

Anti-trust intervention is consequently associated with potential benefits – i.e. the possible elimination of anti-competitive effects – but it is also associated with costs. A sufficient condition for efficient antitrust intervention must be that the net effect of regulatory intervention is positive.

Ronald Coase’s critique is particularly relevant for this problem (1964, p. 195): “Contemplation of an optimal system may provide techniques of analysis that would otherwise have been missed and, in certain special cases; it may go far to providing a solution. But in general its influence has been pernicious. It has directed economists’ attention away from the main question, which is how alternative arrangements will actually work in practice. It has led economists to derive conclusions for economic policy from a study of an abstract of a market situation. It is no accident that in the literature…we find a category ‘market failure’ but no category ‘government failure.’ Until we realize that we are choosing between social arrangements which are all more or less failures, we are not likely to make much headway.”\(^{37}\)

A second advantage with the economic approach is therefore that it permits us to address a more fundamental question: Will antitrust intervention improve long-run economic efficiency? It allows the authorities to make priorities and focus on the most important competitive problems where antitrust intervention can enhance welfare.\(^{38}\)

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\(^{35}\) There is always a risk of regulatory mistakes due to limited information about the facts, the magnitude of possible effects and uncertainty related to future development.

\(^{36}\) The last effect depends of course ultimately on the standard applied to distinguish illegal “abuse” of dominance from legal “use”.


\(^{38}\) Given the limited resources of the antitrust agencies it makes sense to focus on the most important problems. This view is articulated by the Commission as an argument for the current review. In a recent
In principle one can address this issue in every individual case. It is, however, difficult to imagine that the regulatory costs and risks can be determined in detail on a case-by-case basis. Nevertheless, the trade-off between benefits and costs of regulatory intervention can be assessed more generally. If the expected costs and risks associated with regulatory intervention are high, then the potential gains must be equally high or higher, i.e. the anti-competitive effects identified with the economic approach must be of a certain magnitude and a feasible remedy that can solve the anti-competitive problem must be identified.

In other words, the regulatory costs can be used to determine decision rules - i.e. thresholds for intervention - that are efficient on average, even though inefficiencies and costs can outweigh the benefits in a particular case. This includes appropriate tests in order to reduce the risk of false-positives, i.e. over-deterrence, or false-negatives, i.e. under-deterrence. 39

A third advantage with an economic approach to article 82 is that the effects-based analysis possibly provides some useful information about the magnitude of the harm to consumers and to society. Fines and damages can therefore be based on the identified effects. This could possibly improve the efficiency of the sanctions used in competition policy. 40

One possible disadvantage with an economic approach to Article 82 is that it is more demanding and possibly more difficult to apply in a given situation. Individual firms that take strategic decisions continuously have to assess the legality of their behavior on a daily basis. A complex case-by-case analysis may introduce administrative costs and...
uncertainty. The method must, therefore, be relatively straightforward, robust and predictable so that dominant firms have a reasonable chance to draw the line between legal and illegal behavior with some certainty.

2.1. Fundamental issues

While the economic approach is methodologically well-defined in principle – i.e. a consistent comparison of two equilibrium outcomes – it is still necessary to be careful about the details.

In fact, the economic approach requires a specification in several dimensions, all of which have importance for the assessment and conclusions. The three most fundamental issues are:

- Definition of anti-competitive effects
- Factors taken into account in the assessment
- Specification of the decision rules

Objective

The definition of anti-competitive effects is intimately linked to the objective of competition policy in general, and the objective of Article 82 in particular. A precise definition of “anti-competitive effects” is necessary in order to distinguish “use” from “abuse” of market power, harmful from harmless conduct and, ultimately, efficient from inefficient outcomes.41

Method

The economic approach is primarily methodological; i.e. a systematic comparison of equilibrium outcomes. The assessment and conclusion in any given case depends on the assumptions made and the factors incorporated in the analysis. Both the equilibrium

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41 See for instance Michael A. Salinger, “Can economics bridge the Atlantic? Monopolization under Section 2, Dominance under Article 82, and Fouls in Football,” Downloaded from http://www.ftc.gov/speeches/salinger/050920antitrustsymposium.pdf
behavior as well as the equilibrium outcome depends on the assumptions. The conclusions about effects – i.e. potential harm – as well as the intent of the dominant firm – i.e. the rational for its conduct – can thus be very different if one uses different models. A method based on economically sound assumptions is important for a correct assessment and conclusion. The economic approach is consequently only improving overall efficiency when the method used is reasonably correct. Incorrect assumptions may, on the other hand, result in systematic error and inefficiency. It should also be stressed that a clear specification of the method and underlying general assumptions are of importance for predictability. Unless firms and third parties know the method and assumptions fairly well they are not able to predict the outcome of a possible antitrust investigation and can not determine if certain conduct is legal or not.

Decision rules
An effective application of Article 82 does not only require analysis but also a decision. The problem is that the authorities must take a decision based on incomplete information. In a situation with incomplete information there is always a risk of over-deterrence as well as under-deterrence, i.e. one can choose to intervene even if intervention is unmotivated or one can choose not to intervene even if intervention would improve efficiency. In addition, the cost of failure may not be symmetric for the two types of mistake. In particular, the problem of under-deterrence may be less severe than over-deterrence since the former problem is often resolved through the market process in the long-run. The long-run problems with over-deterrence, on the other hand, can be severe since the incentives to innovate are reduced.

In order to minimize the regulatory risks and increase predictability the authorities need an optimal decision rule, i.e. a number of necessary and sufficient conditions for intervention. A number of tests can be used for this purpose. All tests do not serve the same purpose and the decision to intervene or not can be different depending on the test

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applied. It is therefore important to be careful about which test to use and to be clear about how it should be applied.

2.2. The method

*The Commission’s approach to Article 82*

The Commission introduces a mixed approach to Article 82 in its discussion paper. The proposal is built on form, effects-analysis and presumptions. However, the methodological approach is not clear. A pure economic approach has several advantages and is therefore preferable to the alternative suggested by the Commission.\(^{43}\)

*A unified assessment of competitive effects*

An economic approach to Article 82 should include a consistent comparison of relevant alternatives. More generally it should answer two critical questions: Why is a certain type of behavior harmful? Why is it profitable for the dominant firm?

The most reasonable method for an economic approach to Article 82 is a unified assessment (see Figure 1), which is in line with the analysis undertaken in merger cases.\(^{44}\) The purpose should be to assess if certain behavior results in a significant impediment to competition.

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\(^{44}\) Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, Official Journal C 31, 05.02.2004, pages 5-18
Figure 1: An integrated assessment of a dominant firm’s conduct (A totality-of-the-circumstance approach)

Market power effects:
- Substitution
- Potential competition
- Dynamic effects

Efficiencies:
- Cost-savings
- Network effects
- R&D

Counter veiling factors:
- Entry
- Buyer power

Relevant alternative:
- Failing firm
- Inefficient competitor

Intervention:
1. Dominance?
2. Anti-competitive effect?
3. Efficiency-enhancing remedy?
An integrated assessment requires a careful investigation of all important factors by the antitrust agencies. The authority must analyze market power, efficiency, entry and other relevant factors before it can determine the competitive effects. The effect of efficiencies should, thus, be incorporated in the integrated analysis. It is not useful to think of efficiencies as a “defense” for otherwise illegal conduct. There is no real trade-off between anti-competitive effects and efficiencies and, consequently, no real defense for anti-competitive behavior.45

There is no fundamental methodological difference between an effects-analysis of mergers, agreements or abuse of market power. The purpose is to make a consistent comparison between two scenarios. The question is if certain investigated phenomena – mergers, agreements or unilateral behavior by dominant firms – have serious anti-competitive effect. The factors that are important for the assessment are generally the same; i.e. first assessing market power effects, second cost-savings or other synergies, finally, taking entry and other forms of repositioning into account.46 The ultimate question – if antitrust intervention improves economic efficiency - should also take into account that intervention in the unilateral conduct of dominant firms is generally very difficult and associated with great risk.47

2.3. To protect competition or competitors – or both?

The aim of competition policy is to protect the competitive process. The objective of Article 82 should be to avoid that dominant firms harm competition by building artificial barriers to competition.

45 It may, nevertheless, be reasonable to ask the defendant to provide sufficient information for the analysis.  
46 The economic approach to merger control has resulted in a well-specified method with several building blocks that are considered to be important for the competitive effects. 
47 An intervention to correct a distortion in a market with a dominant firm is very difficult. The theory of second-best suggests that a correction of one distortion in a second-best world may introduce other – possibly more severe – distortions.
The European Court of Justice explicitly defined abuse in *Hoffmann-La Roche* 48: “The concept of abuse is an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those which condition normal competition in products or services on the basis of the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition.”

The Commission argues that the objective is to protect competition, but not competitors. It also suggests that a dominant firm’s behavior should be evaluated with a consumer welfare standard. Conduct that reduces consumer welfare is considered illegal. Behavior that does not harm consumers is, however, considered legal, even if it hurts competitors.

Commissioner Neelie Kroes has articulated the objective of Article 82 the following way: “My own philosophy on this is fairly simple. First, it is competition, and not competitors, that is to be protected. Second, ultimately the aim is to avoid consumers harm.” 49

These objectives are consistent with each other in some situations. But it is important to recognize that they are not consistent in every situation. 50 In fact, it may be in the interest of consumers to protect competitors from aggressive competition that enhance long-run efficiency but result in higher consumer prices in the short run. In addition, one must

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49 Neelie Kroes, Preliminary Thoughts on Policy Review of Article 82, Speech at the Fordham Corporate Law Institute New York, 23rd September 2005

50 Michael A. Salinger argues that "even people who profess to have the protection of competition at heart sometimes end up in effect arguing for the protection of competitors. /---/ I am, of course, aware of the argument that in the long run, one must preserve competitors to preserve competition. That is, to put it mildly, an unpopular view in U.S. antitrust circles.", speech downloaded from http://www.ftc.gov/speeches/salinger/050920antitrustsymposium.pdf
observe that the general dynamic interests of consumers are not necessarily consistent with the static interests of consumers in a specific situation.\textsuperscript{51}

More specifically, one interpretation of a dominant firm’s “special responsibility not to allow its conduct to impair undistorted competition on the common market”\textsuperscript{52} is that it requires that a dominant firm competes like a gentleman.\textsuperscript{53} This interpretation, however, boils down to nothing but a protection of competitors rather than competition.\textsuperscript{54}

A short-run static consumer welfare standard, consequently, has several problems. It may result in the conclusion that conduct that result in market power is harmful despite considerable efficiency gains in the long run.\textsuperscript{55} A second problem is that dominant firm behavior is linked to profitability and, therefore the incentives to strive for dominance.\textsuperscript{56} Limiting the incentive to become dominant through a rigorous regulation of conduct, based on static consumer welfare considerations \textit{ex post}, can consequently have negative effects on dynamic efficiency and consumer welfare in the long run.\textsuperscript{57}

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\textsuperscript{51} In a static perspective it is beneficial for consumers to protect competitors and even give access to the dominant firm’s essential production factors. In a dynamic perspective, however, it can be inefficient for consumers as well as for society as a whole.


\textsuperscript{53} For an interesting discussion about transatlantic differences see J. Bruce McDonald, "Section 2 and Article 82: Cowboys and Gentlemen", U.S. Department of Justice, available from http://www.usdoj.gov/atr/public/speeches/210873.pdf

\textsuperscript{54} Amelia Fletcher, Chief Economist at the OFT, notes that "it is important to recognise that dominant firms can damage competition unintentionally, simply by acting in their own short-run interest. A simple example might be a dominant firm which supplies two complementary products. It is well known that the short-run profit-maximising strategy for such a supplier will be to charge less for the products when sold as a bundle than when sold separately. However, it is also well recognised that such ‘bundling’ can lead to the unintended foreclosure of competing firms that only supply one of the two products," The reform of Article 82: recommendations on key policy objectives, Paper for the Competition Law Forum on the reform of Article 82 (15 March 2005), downloaded from http://www.ofi.gov.uk/NR/rdonlyres/41543043-1363-4CD5-B21E-87A9A3DFD160/0/spe0305.pdf

\textsuperscript{55} It is well-known in the economic literature that excess entry in oligopoly markets could be wasteful and reduce total efficiency. A static consumer welfare perspective may thus hinder the competitive process from eliminating inefficient producers, thereby replacing more costly with less costly production.


\textsuperscript{57} Eleanor Fox argues that the tensions and conflicts between different objectives can be solved if antitrust “protect the competition mechanism from real degradations” rather than focusing on the outcome or the competitors. Fox E., “Does an ’Abuse’ Law Protect Competitors while a ‘Monopolizations’ Law Protects Competition?”, 2003, downloaded from http://www.iue.it/
2.4. Some implications of an economic approach to Article 82

An economic approach has several material and methodological implications. Specific facts about supply and demand conditions are incorporated in a model of the market. An equilibrium in which the conduct under investigation is permitted can be systematically compared with an equilibrium in which the challenged conduct is ruled out. The effect of a certain conduct is simply the difference in outcome between the two scenarios. Based on this comparison the following questions can then be addressed: Does the conduct under investigation result in harm? Is it an abuse?

One immediate implication of the economic approach is that the assessment is based on identified effects. It is accordingly necessary to prove potential or actual anti-competitive effects under the specific circumstances. A simple presumption about anti-competitive effects – or consumer harm – of certain types of conduct is not consistent with an effects-based analysis. The economic approach implies that the competition authority must show that an anti-competitive effect is likely as a result of a specific conduct.

Another interesting implication of an economic approach is that the analysis of effects has immediate implications for the assessment of dominance. More specifically, a significant anti-competitive effect of unilateral behavior implies dominance - or else it would not occur. In principle one can argue that a separate analysis of dominance is redundant if one identifies significant harm to competition.

In practice, however, it is reasonable to assess dominance separately as a complement to the analysis of effects; not at least to minimize the risk of excess intervention. Absent a precise magnitude of the anti-competitive effects one should note that a separate assessment of dominance can establish a threshold for intervention; based on the risks and costs associated with intervention one should be reluctant to intervene unless significant market power can be identified. A reasonable priority is to focus on the most
serious problems, i.e. the exploitation or creation of monopoly rather than market power more generally.\textsuperscript{58}

Another important factor is the limitations of economic theory.\textsuperscript{59} It is important to keep in mind that in general there exists no single, undisputed model that can be used for the assessment of anti-competitive effects.\textsuperscript{60} One possible solution to this problem is to look for theoretically “robust” results.\textsuperscript{61} In addition, one may consider a threshold – i.e. a finding of significant market power (monopoly power) – to be a healthy threshold also in this respect.\textsuperscript{62}

2.5. The role of necessary and sufficient conditions

Antitrust decisions are taken based on incomplete information. An effects based approach to Article 82 requires decision rules that increase predictability and minimize the risk of regulatory mistakes. John Vickers raised the fundamental question: "But what are, or should be, the underlying principles by reference to which conduct that distorts and harms competition can be distinguished from normal competition on the merits?"\textsuperscript{63}

A test can be formulated as a necessary or sufficient condition for illegality under Article 82. Commentators and courts have formulated different tests that can be applied to determine if a dominant firm’s conduct is an abuse or not. These tests have very different properties; resulting in different conclusions as well as different types of regulatory errors. Generally decisions can result in false positives, i.e. finding of an abuse despite a pro-

\textsuperscript{58} In Europe a monopoly or close to monopoly is sometimes referred to as ”super-dominance” or a “paramount position”.
\textsuperscript{59} Bork criticized an idealistic economic approach in antitrust: “A determined attempt to remake the American economy into a replica of the textbook model of competition would have roughly the same effect on national wealth as several dozen strategically placed nuclear explosions. To say that is not to denigrate the models but to warn against their misuse”, The Antitrust Paradox, New York : Basic books, 1978
\textsuperscript{61} An example of this approach is John Sutton, "Sunk costs and market structure: Price competition, advertising, and the evolution of concentration", Cambridge, Mass. and London: MIT Press, 1991
\textsuperscript{62} See John Vickers, "Abuse of market power", Speech to the 31st conference of the European Association for Research in Industrial Economics, Berlin, 3 September 2004
competitive effect, or false negatives, i.e. no finding of an abuse despite an anti-competitive effect. There are two important factors that suggest that over-deterrence is more problematic than under-deterrence. False positives reduce the incentives for innovation while false negatives can be self-correcting through the market process in the long run. It is consequently reasonable to formulate tests that tend to reduce the risk of over-deterrence in particular.

<table>
<thead>
<tr>
<th>Test</th>
<th>Standard</th>
<th>Advantage</th>
<th>Disadvantage</th>
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<tbody>
<tr>
<td>Profit sacrifice&lt;sup&gt;64&lt;/sup&gt;</td>
<td>Conduct would not be profitable but for the anti-competitive effect</td>
<td>Focus on anti-competitive intent</td>
<td>Inefficient behavior is acceptable in some cases</td>
</tr>
<tr>
<td>Equally efficient competitor&lt;sup&gt;65&lt;/sup&gt;</td>
<td>Conduct is likely in the circumstances to exclude from the defendant's market an equally or more efficient competitor.</td>
<td>Competition on the merits – inefficient producers can be eliminated</td>
<td>Exclusion of less efficient competitors that improve welfare is accepted</td>
</tr>
<tr>
<td>Consumer harm&lt;sup&gt;66&lt;/sup&gt;</td>
<td>Conduct results in higher prices or less output and, thus, harm consumers</td>
<td>Directly linked to the objective of competition law</td>
<td>Protection of inefficient competitors: “Static efficiency offense”</td>
</tr>
<tr>
<td>No economic sense&lt;sup&gt;67&lt;/sup&gt;</td>
<td>Conduct would make no economic sense for the defendant but for the tendency to eliminate or lessen competition.</td>
<td>Intent to harm competition: profit sacrifice can be “conceptual” rather than “temporal”.</td>
<td>Incentives for drastic innovations may be reduced: “Dynamic efficiency offense”</td>
</tr>
<tr>
<td>Total welfare&lt;sup&gt;68&lt;/sup&gt;</td>
<td>Conduct introduces inefficiencies and reduces total surplus and welfare</td>
<td>High threshold for antitrust intervention may prevent regulatory mistakes</td>
<td>Not consistent with political ambition to protect consumers in the short run</td>
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An economic approach to Article 82 can either be based on a direct or indirect test. A direct test is based on an assessment of the effects; tests in this category include the “consumer harm” test – i.e. a direct assessment of the consumer welfare effects of a particular conduct – and the “total welfare” test – i.e. a direct assessment of the total efficiency effects of the dominant firm’s behavior.

The most obvious problem with the direct tests is that the relationship between competition and welfare is not one-to-one. Competitive behavior can reduce welfare in some situations, e.g. an investment in a drastic cost-reduction that eliminates a competitor. This conduct should accordingly be considered illegal under a welfare test. Equally troubling, anti-competitive behavior can increase welfare under specific circumstances, e.g. conduct that eliminates a free-riding competitive fringe, and should thus be considered legal under a strict welfare standard.

An indirect test is based on the implications of the intent of the dominant firm. For instance, one may deduct an anti-competitive effect from a finding that a particular conduct is only commercially rational when the result (and effect) is anti-competitive. This is the rational for the “profit sacrifice” test and the “no economic sense” test.

The most problematic aspect of an indirect test is that it may be impossible to distinguish “revealed market power effects” from “revealed efficiency effects”. Oliver Williamson notes that “the uncritical propensity of antitrust specialists using the lens of choice to invoke monopoly to explain deviations from simple market exchange /---/ But that does not exhaust the possibilities. Upon bringing the lens of contract to bear, such practices and structures are often better understood as private ordering efforts to accomplish economizing purpose and realize mutual gain.”

No test explicitly incorporates dynamic consumer welfare. This problem can either be solved with a combination of several tests or with a proxy for “long-run efficiency”.

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Some commentators would argue that the consumer harm test is a good candidate.\textsuperscript{70} Others would argue that an alternative proxy for the long run interest of consumers is the “total welfare” standard.\textsuperscript{71} Yet others suggest that a combination of tests is more appropriate.\textsuperscript{72} A final group of commentators argue that no single test should be adopted.\textsuperscript{73}

The main differences between different tests can be illustrated with a number of examples.

\textit{Raising rivals’ costs}\textsuperscript{74}

Let’s assume that the dominant firm has a variable production cost of 10 euro and its only competitor has a production cost of 35 euro. Output is 35 units for the dominant firm and 10 units for the competitor and the equilibrium price is initially 45 euro. The gross margin for the dominant firm is therefore 35 euro, while the corresponding margin is 10 euro per unit for the competitor.

Suppose first that the dominant firm can take an action to increase the fixed cost of the competitor with 150 euro; an action that drives the competitor out of the market so that the dominant firm can raise the price to 50 euro per unit.

The consumer harm test would come to the conclusion that this behavior is illegal under Article 82. The total welfare test may or may not come to the conclusion that this conduct is harmful, depending on cost and demand factors. The “profit sacrifice” test is not directly applicable, but behavior would be abusive under the “no economic sense” test.

\textsuperscript{71} Robert H. Bork, The Antitrust Paradox, New York : Basic books, 1978
\textsuperscript{72} Amelia Fletcher suggests that a “weak” equally efficient competitors test should be a necessary condition for abuse and a “strong” equally efficient competitors test should be sufficient for a rebuttable presumption of abuse, Paper for the Competition Law Forum on the reform of Article 82 (15 March 2005)
\textsuperscript{73} For instance, the ICC argues that "the Commission should not adopt a single test -- for all forms of potentially exclusionary conduct because there is no consensus that any such test is applicable in all circumstances," Comments on the Reform of the Application of Article 82 of the EC Treaty, 12 December 2005, available at http://www.iccwbo.org/policy/competition/display7/folder79/index.html
\textsuperscript{74} This issue was first analyzed in Steven C. Salop & David T. Scheffman, “Raising Rivals' Costs,” American Economic Review, vol. 73, 1983, pp. 267-71.
The “equally efficient competitor” test is difficult to apply in this case. It would not constitute an abuse under the “equally efficient competitor’s test” as long as an equally efficient competitor can survive the higher cost and stay in the market. On the other hand, raising the rival’s fixed cost is only an equilibrium strategy when the dominant firm meets a less efficient competitor. It can, consequently, be argued that this conduct is illegal under the “equally efficient competitor” test since it would only be an equilibrium strategy to invest in raising the rival’s cost if the equally efficient competitor is eliminated.

Next, consider the possibility that the variable cost is increased with 15 euro for both firms.75 The dominant firm may find it profitable to abstain from an effort to keep costs low when the effect is that the competitor is eliminated, while the dominant firm finds it profitable to make an effort to reduce the cost otherwise. In this case it is interesting to note that the consumer harm test as well as the “no economic sense” standard would come to the conclusion that the dominant firm’s (passive) behavior is illegal.

Cost-reductions

Let’s return to the original assumption that the dominant firm has a variable production cost of 10 euro per unit and its only competitor has a production cost of 35 euro per unit. Now suppose the dominant firm makes an investment to reduce its cost to 7 euro per unit. The lower variable cost induces a re-optimization by the dominant firm. If the competitor remains in the market the supply of the dominant firm is increased with 2 units while the competitor’s supply is reduced with 1 unit. The equilibrium price falls to 44 euro per unit.

The profit-sacrifice and no economic sense tests may result in the conclusion that this investment is an abuse, if it is motivated by business-stealing from the competitor.76 This conclusion is different from a conclusion based on the other tests. It would not be considered illegal under the consumer harm test nor the equally efficient competitor’s test.

75 This could happen, for instance, due to a new technical regulation or due to higher wages after a unionization of the labor force.
76 This is for instance true if the cost of the investment 125 euro.
It would generally be considered legal under the total welfare standard, but under exceptional circumstances “total welfare” could be reduced due to excessive use of resources in R&D activities.

Now suppose that the competitor’s fixed cost is so high that it is unprofitable to stay in the market at the lower equilibrium price level and the competitor consequently exits. The dominant firm then raises the price to 48.50 euro per unit.

The investment may now be considered illegal under the profit sacrifice test as well as under the consumer harm test. The profit sacrifice test and the consumer harm test consequently incorporate an “efficiency offense”. It would, however, generally not be considered illegal under the equally efficient competitor test. Again, the total welfare test may or may not come to the conclusion that this conduct is harmful, depending on cost and demand factors.

*Exclusive dealing*

Now suppose that the dominant firm pays an upstream supplier of an essential input to exclusively sell to the dominant firm and not to the competitor. The competitor is therefore excluded and ends supplying the downstream market.

First, consider an expansion of the dominant firm’s supply with 5 units as a result of the contract with the upstream supplier. Since the gross margin is 35 at the initial price – absent exclusion – the gross profit of the dominant firm increases with 175 euro even at the competitive price and the dominant firm does not sacrifice any profit to monopolize the market unless the payment to the upstream firm is greater than 175 euro. This conduct is consequently legal under the profit sacrifice and no economic sense tests.

It would, on the one hand, be illegal according to the consumer harm test if the price can be raised after exclusion. It can, on the other hand, be legal under the total welfare test
since significantly more efficient production by the dominant firm replaces the more costly production by the competitor.  

Consider for a moment the possibility that it is impossible to verify what would happen to the consumer price after an exclusion of the competitor. The consumer harm test is therefore not applicable directly. What can be concluded for the fact that the dominant firm pays significantly more than 175 euro to the upstream firm as part of the agreement? According to the profit sacrifice test this agreement would be illegal since it makes no economic sense to pay the upstream firm this much for exclusivity unless the dominant firm can increase the price as a result of exclusion. Consumer harm is accordingly a logical consequence of the willingness to sacrifice profit and the consumer harm test is therefore applicable indirectly.

However, a competing explanation instead of an anti-competitive effect is that a sufficiently large (possibly unverifiable) efficiency-effect motivates the payment, e.g. due to reduced free-riding problems or other synergies. Accordingly, it is impossible to conclude that a sacrifice of profits at the competitive price and cost must imply an anti-competitive effect and the “profit sacrifice test” is neither a necessary nor a sufficient condition for consumer harm.  

Innovation

Next, assume that a dominant firm makes an innovation and introduces a new, complementary product. Through an integration of the new and old product the dominant firm gets a variable cost of 10 euro due to an efficiency generated in the initial market. A competitor can introduce a similar, competing product with a variable cost of 35 euro.

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77 Efficiency may increase despite a price increase and reduction of consumer surplus since the producer surplus of every unit replaced by the dominant firm adds 25 euro to total efficiency.

78 Williamson argues that “the uncritical propensity of antitrust specialists using the lens of choice to invoke monopoly to explain deviations from simple market exchange /---/ [but] such practices and structures are often better understood as private ordering efforts to accomplish economizing purpose and realize mutual gain.”, The Lens of Contract: Private Ordering, The American Economic Review, Vol. 92, No. 2, Papers and Proceedings of the One Hundred Fourteenth Annual Meeting of the American Economic Association (May, 2002), pp. 438-443
Suppose the product integration excludes the competitor from the market and the equilibrium price is 50 euro. This conduct is illegal according to the consumer harm test if the consumer price without product integration – absent exclusion – is below 50 euro. Product integration may, however, generate sufficient cost-savings to be legal according to the total welfare standard as argued above.

More interesting is to consider the incentives for innovation ex ante. If the cost of innovation is sufficiently high and the disadvantages of not integrating the products are sufficiently large, then it would not be profitable for the dominant firm to innovate. Consumer welfare would therefore be higher if product integration is permitted.

**Quality improvements**

Finally, assume that a dominant firm and its competitor both have a variable production cost of 10 euro. Initially the dominant firm produces 40 units while the competitor produces 20 units and the equilibrium price is 30 euro. Suppose the dominant firm can make a quality improvement worth 10 euro to consumers per unit. The competitor is excluded by this new (and incompatible) quality and the dominant firm can raise its price to 55 euro and output to 45 units.

This conduct would be illegal according to the consumer harm test, since the consumer price increases more than the value of the quality improvement. It does not fail the profit sacrifice test – and is thus legal under this test – as long as the cost to improve quality is less than 10 euro per unit. It is legal conduct under the total welfare test, if the cost to improve quality is sufficiently low and the loss of surplus due to reduced output is moderate. Otherwise it is inefficient and thus illegal.
2.6. Synthesis

The analysis above illustrate that all tests have some advantages and some disadvantages. However, some problems are more severe than others. The consumer harm test has several problems, including a possible efficiency offense. The total welfare test, on the other hand, is hard to reconcile with the overall objective of Article 82.

The test that has the best overall properties is the “equally efficient competitor” test since it is consistent with the efficiency-enhancing aspects of competition. The best decision rule for intervention against exclusionary abuse\textsuperscript{79} is, therefore, a combination of three necessary conditions:

(i) finding of dominance,
(ii) proof of conduct failing the equally efficient competitor test,
(iii) feasibility of an efficiency-enhancing remedy.

3. Conclusions

This paper argues that the current application of Article 82 has several material problems. The current form-based approach to Article 82 may reduce the incentives to strive for dominance and could also hinder the process of rationalization.

It should be recognized that efficiency is often the main explanatory factor for dominance and this has important implications for the application of Article 82 in a dynamic and static perspective. In addition, it is very difficult to regulate the unilateral behavior of individual firms.

A pure economic approach has several advantages and is preferable to the alternative suggested by the Commission. Recognizing that the objective of Article 82 is to protect competition, it shifts focus from certain forms of conduct to the ultimate problem: anti-

\textsuperscript{79} An assessment of exploitive abuse should be based on a consumer welfare standard directly.
competitive effects. An economic approach, nevertheless, has important implications and it is critical to address a number of issues. In particular, the Commission needs to define the objective, the method and the standard for intervention.

Based on the above discussion, a modernization of the Commission’s approach to abuse of dominance can clarify that:

1. the objective is to protect competition and long-run consumer welfare, neither competitors nor static consumer surplus,
2. assessment is based on the totality of the circumstances analyzed with robust economic models and a consistent comparison of equilibrium outcomes,
3. three conditions are necessary for intervention against unilateral behavior: (i) a finding of a dominant position, (ii) finding of conduct failing the equally efficient competitor test and (iii) the existence of an efficiency-enhancing remedy.

An effects-based approach to Article 82 is an economic analysis of the competitive effects of a dominant firm’s conduct in a specific situation. The conclusion should be based on the totality of the circumstances. One has to assess and integrate all the factors in the analysis of competition, including market power, efficiency, entry and other relevant aspects. The great advantage with the economic approach is that it recognizes that different conduct can have different effects and the effects should be determined on a case-by-case basis. The economic approach is, consequently, not consistent with strong presumptions.

Finally, an application of Article 82 should be based on the fact that competition works best without detailed intervention and regulation. Competition policy can improve efficiency by protecting the market mechanism, not by replacing it. Detailed rules for a dominant firm’s commercial strategy - including prices and rebates - are generally not consistent with an economic approach to Article 82.
In addition, it is unlikely that antitrust agencies can improve welfare with detailed regulation of product design, quality and integration of products. Disaggregated decisions by consumers and producers are taken based on detailed information that is generally not available for authorities. Efficiency considerations and trade-offs should thus be left to the market participants.