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European Competition Policy:

Design, Implementation and Political Support

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CREDITS

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1 Executive summary

1.1 Why focus on competition policy?

Europe needs to boost its competitiveness to face challenges from emerging countries and to reduce its efficiency gap with the United States. A major and widely debated EU economic recovery plan, the Europe 2020 Strategy, aspires to put into practice the right measures for a more competitive Europe. Failure in this mission could have devastating results, with a great deal of European industry and jobs lost to outside players.

Public authorities can enhance competitiveness in two ways; two different but complementary lines of intervention. The first consists of taking direct action and measures to intervene in economic activity. This is the case of traditional economic policies, both fiscal and monetary, as well as of most supply-side policies, for example various types of structural reforms. The second may be seen as less direct, but it is equally crucial. In it, public authorities do not take direct action themselves, but instead try to remove all those hindrances and impediments that threaten to obstruct the normal competitive functioning of markets. This is the purpose of competition policy, delegated to the European Commission at EU level and to national competition authorities at EU Member State level.

More specifically, large firms and corporations usually enjoy a certain degree of market power; that is, the potential of controlling relevant aspects of the market in which they operate, such as market prices, product variety and innovation processes. Such market power is a perfectly

reasonable result of the successful business strategies and decisions of these firms.

However, under some circumstances and in order to achieve further profits, firms and corporations may be tempted to use their market power to the detriment of competitors and of the general effective functioning of the market. *It is the purpose of competition policy to identify and ban such anti-competitive behaviour.*

Competition policy thus consists of ensuring the proper functioning of the market, and the proper functioning of the market is in turn a most effective instrument for fostering economic growth and social well-being. Besides, other economic policies are mostly unproductive if the underlying economy in which they are applied does not function properly in terms of its general competitive conditions.

Competition policy is also essential in times when the general public consensus tends to be more sceptical of the capability of the market economy to attain widespread well-being. This attitude risks pushing policymakers towards more protectionist approaches.

The goal of this paper is to make available to European policymakers a general and consistent framework to design the competition policy of the future, as well as to reform existing competition policy in the EU. Reforming European competition policy represents a delicate task, as is demonstrated by a debate on the issue recently opened at EU Commission level.

1.2 Flaws of the current approach to competition policy in the EU

The competition policy currently followed by European and national authorities permits a business practice executed by a company to be banned if it can be shown that this practice falls within a pre-established list of practices that can be considered anti-competitive. We call this a checklist approach.

With a checklist approach in place, a business practice is analysed and judged much more on the basis of the commercial and legal form that it takes than on the basis of its specific economic consequences. As a result, competition policy is substantially reduced to case law analysis. Furthermore, the checklist approach has many specific faults. For example:

1. Lists of undesirable business conducts can never be complete. A company that has been caught using a certain anti-competitive practice may well shift to a second, different practice that entails the same anti-competitive purpose but differs from the first only in terms of its legal details. Within the checklist approach, an entirely new competition case has to be opened against this company. Hence competition cases last for a long time and are a drain on public resources.

2. With case law analysis, business practices receive different treatment according to different legal traditions and jurisdictions; this makes competition policy less predictable, with consequent damage to the normal business activity of firms.

3. With a checklist approach in place, firms that want to behave anti-competitively will look for practices that have not yet been formally banned. In other words, the checklist can indicate to firms which is the 'best way' to violate competition rules according to the anti-competitive effect they want to achieve.

4. Above all, the checklist approach fails to use—in assessing whether a firm's business practices are within the law—the only relevant criterion that should be used as a guide for misconduct; that is, the actual economic consequences of the business practices themselves. Indeed, a specific business practice may entail undesirable economic consequences under some circumstances, while it can be not only acceptable, but even desirable, under different circumstances and in different economic contexts. Evaluating a business practice mainly on the basis of its legal and commercial form misses the point.

1.3 An economics-based approach to competition policy in the EU

In this study we propose an economics-based approach to the future design of European competition policy. This approach differs substantially from the checklist approach. We argue in favour of the economics-based approach as a consistent and general framework for policymakers to design future policies and to reform existing policy in the EU.

The principal aspect of the economics-based approach to competition policy is that it establishes a *consumer welfare standard* as the only guide for policymakers in the design of competition policy. A consumer welfare standard

prescribes that a certain business conduct, implemented by a certain company, should be considered as anti-competitive and banned by competition authorities if and only if it harms consumer welfare.

The economics-based approach has many beneficial features, and many advantages over the current checklist approach. For example:

1. With a single operational criterion as its basis, competition policy will be reorganised and simplified. The duration of competition cases will be shortened, and cases will be easier to manage.

2. With a single operational criterion as its basis, competition policy will be more predictable, hence creating a more stable framework for firms' business activities.

3. With the economics-based approach in place, competition cases will be more grounded in sound economic analysis. Indeed, economic theory provides the right tools to assess whether a business conduct harms consumers' welfare.

4. Consumer welfare will become the main focus. Competition authorities will be statutorily expected to protect consumers, instead of running the risk of protecting competitors.

5. With the economics-based approach in place, a firm's business conduct will no longer be defined by its commercial form, but by its effect on consumers' welfare. As a result, firms will be free to choose those business strategies which maximise their profits—those which foster

efficiency and growth—under the constraint, however, that these strategies do not harm consumers but rather benefit them.

2 Introduction

In the face of growing globalisation, European industry needs a boost in its competitiveness in order to stay effectively in the market and to face challenges from emerging countries. Should Europe fail to raise its level of competitiveness, it would lose a great deal of its industry to outside players, with a considerable loss of jobs and welfare for European citizens.

Europe also needs to address a substantial efficiency gap with respect to the United States. According to some analysts, the United States—the country in which the recent financial crisis originated in the first place, and where it quickly evolved into a global recession—will probably recover faster than any country in Europe. The US industrial structure is quite competitive, flexible and healthy overall and will allow for a relatively fast recovery, while in contrast the European economy is overly rigid, protected and, in many sectors, inefficient, and will encounter more difficulties.

The need for a more dynamic European economy is furthermore established and addressed in the wider EU strategy for growth in Europe—the renowned Europe 2020

Strategy. The aim of this well-known EU economic recovery plan is to find the right path towards a more competitive Europe.

A process leading to a more competitive Europe will require two complementary lines of action:

1. On the one hand, sound economic policy measures, which aim directly and actively at increasing the efficiency of the economy, will need to be implemented. This will mainly be the responsibility of EU policymakers, and will depend substantially on the capability of Member States to implement national reforms and policies that are structural, fiscal and monetary.

2. On the other hand, it will entail laying down proper rules and procedures which aim to remove all those hindrances and obstacles currently affecting the efficient execution of economic activity in Europe. This action requires that public authorities do not put forth a direct economic action by themselves, but instead remove from the economy any barrier that obstructs the normal competitive functioning of markets.

This second form of public intervention, which has been primarily delegated to the European Commission at EU level and to national competition authorities at EU Member State level, represents the substance of competition policy, and it is the subject of this study.

To be more specific, large firms and corporations usually enjoy the power of controlling, through their business practices, relevant aspects of the market in which they operate such as market prices, market quality and variety of

products, investments and innovation levels. Under some circumstances, the rationale of profit maximisation that guides these firms may lead them to use their market power to the detriment of the general efficient functioning of the market. The precise purpose of competition policy is to identify and ban such anti-competitive behaviour.

Competition policy thus consists of ensuring the correct functioning of the market, and the correct functioning of the market is in turn a most effective tool to promote economic growth and social well-being. Furthermore, many of the most common macroeconomic policies, both fiscal and monetary, will be in vain if applied to a market system that does not function well in terms of its general competitive conditions.

A careful and efficient competition policy is thus of the utmost importance in any advanced market economy. Today it is even more important due to a new lack of confidence in the capability of free competition to guide the economy towards a satisfactory and widespread level of social well-being. In the shadow of a looming worldwide recession, many EU countries are in fact lured more and more into the adoption of protectionist, instead of liberal, policies.

It is a future challenge for policymakers and EU institutions to renew confidence in the market system as a tool for attaining social and economic well-being. This challenge will not be won unless institutions prove themselves capable of making the market work properly. Designing a better competition policy will be the first step in this direction.

The purpose of this paper is to assist and support policymakers in the design and implementation of the next generation of competition policies in the EU, as well as to

assist them in the evaluation and reform of current European competition policy. Reforming European competition policy is a delicate and sensitive issue, as demonstrated by a recent high-level, EU-wide debate on the subject.

In this paper, we propose an *economics-based approach* to the design of European competition policy. This approach is substantially different from the one currently adopted by European and national competition authorities. We propose the economics-based approach as a consistent and general framework for policymakers to design the next generation of European competition policies and to reform existing competition policy in Europe.

The principal aspect of the economics-based approach to competition policy is that it establishes a *consumer welfare standard* as the main guide for policymakers in the design of competition policy. A consumer welfare standard prescribes that a certain business conduct, implemented by a certain company, should be considered as anti-competitive and banned by competition authorities if and only if it harms consumer welfare.

This is in contrast to the approach currently followed by European and national competition authorities, where a business conduct is banned in a competition case if it can be shown that this conduct falls into a pre-established list of conducts that can be considered anti-competitive.

The current approach to the application of competition policy is substantially reduced to case law analysis. A business practice is analysed and judged much more on the basis of the commercial and legal form that it takes than on the basis of its specific consequences for consumers' welfare.

There is of course the presumption here that the business practices included in a list of forbidden conducts are indeed those practices that harm consumers' welfare; or at least that consumers' welfare is a criterion on which the inclusion of a forbidden conduct is based. However, this is beside the point. Lists of undesirable business conducts can never be complete. Furthermore, a specific business conduct may harm consumers' welfare under some circumstances and within some contexts, while it can be not only acceptable, but even desirable, under different circumstances and in different economic contexts.

On the contrary, with the economics-based approach business practices will not be defined by their commercial and legal form, and firms will be free to choose the most profitable commercial practice under the sole constraint that it does not harm the welfare of consumers. This will foster economic efficiency and growth to the benefit of consumers.

Another feature of the economics-based approach consists in the fact that an enormous variety of business practices, often differing only marginally and in terms of their legal or commercial aspects, will be classified and treated according to a common, consistent and clearly predefined standard. Practices by firms will be evaluated only in terms of their effect on consumer welfare. Competition policy will be, in this respect, reorganised and simplified and will be run more effectively, absorbing fewer public resources and with a clearer focus on consumer protection.

Overall, the economics-based approach places the protection of consumers definitively at centre stage while at the same time promoting economic efficiency and growth.

This will be achieved by giving the right incentives to firms to be responsive to consumers' needs in their search for economic efficiency and profits, without constraining firms' economic activity in any other way. A competition policy based on a consumer welfare standard will necessarily promote the correct functioning of the market system in accordance with the satisfaction of consumers' needs.

This report does not address competition authorities, and hence the aim is not to give instructions on how to deal with actual competition cases. In the report, a technical treatment of possible anti-competitive practices is avoided. Instead, the report addresses policymakers, and deals with the more general problem of how the entire area of competition policy should be designed and implemented. The report poses and answers questions such as the following: To which general principles should the design of competition policy conform? What are the consequences of such principles for the implementation of policy by competition authorities? How should policymakers generally design competition authorities in order to achieve effective application of policy?

The report is organised as follows:
In **Section 3** we present the economics-based approach to the design of competition policy. We elaborate on its main features and advantages, and contrast it with the approach currently followed in the EU.

In **Section 4** we propose, based on the economics-based approach, various general suggestions that policymakers could give to competition authorities in order to allow them to institute competition policy consistently and effectively in various contexts.

In **Section 5** we address the problem of political support for competition policies within the framework that we have proposed in the previous sections.

In **Section 6** we conclude and present, in a more compact format, a list of recommendations.

3 The design of competition policy: an economics-based approach

We propose to policymakers and decision-makers, in this section, an economics-based approach to the design of competition policy. Section 3.1 describes it extensively, while section 3.2 elaborates on its main features and advantages and contrasts them with the approach to competition policy currently followed by European and national authorities.

Broad reform of the principles governing competition policy in Europe is currently being debated at EU level. A more economically oriented approach to competition policy has been outlined and suggested in recent influential papers such as Gual et al. (2006) and Tirole (2005), and is beginning to be acknowledged by the European Commission; see for example the proposed reforms of Articles 81 and 82 of the Treaty of Rome and of merger control (in EC 2004, 2008; European Council 2003 respectively).

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The debate is ongoing and is expected to widen considerably, especially after the Commission's decision, in December 2008, to base the reform of Article 82 on clearer and sounder economic principles—a decision which triggered resistance and opposition. For example, Lang (2008) tries to defend the current setup of European competition policy on the basis of purely juridical considerations. An answer to the arguments raised by Lang can be found in Gual et al. (2006), who also provides real examples. With different arguments, a position in favour of a more economically sound approach to competition policy is expressed by Martin (2007).

3.1 A consumer welfare standard

It is generally argued that the fundamental purpose of competition policy is to protect competition in the market. According to the European Commission (2000, 6), 'the first objective of competition policy is the maintenance of competitive markets'.

Accordingly, competition authorities should forbid business practices by firms whenever these practices harm competition, and allow them otherwise. But what does it mean to harm competition?

In general terms, competition in the market is the main force that guides a capitalist system towards an efficient allocation of resources, and in doing so towards economic efficiency and growth. In this respect, the maintenance of competitive markets cannot be overemphasised, and represents a fundamental principle to be followed by policymakers and market authorities.

However, the rationale of safeguarding competition leads to problems as soon as we try to translate it into concrete guidance for policymakers and into concrete standards that an authority should follow to assess a given business conduct in practice. The problem is that there is no unequivocal definition of what competition is, nor is there any general technique to measure competition in actual cases. This reality constitutes a major flaw in the running of market governance activities, such as competition policy, on the basis of protecting competition per se.[1]

Economic theory studies how individuals collectively create social environments in which their actions, dictated solely by their individual self-interests, turn out to be reciprocally compatible and implementable. The market is one of these environments. 'Competition' denotes an economic process in which, given the social environment, firms decide what to produce and how, with the intention of maximising their profits; and in which people decide what to buy and sell, with the intention of maximising their well-being. The suggestion is that, during this process, firms generally compete with each other to sell their products to consumers; and consumers may compete with each other to buy products or to sell labour services to firms.

As a result, competition generally leads to firms being more responsive to demand and offering lower prices and

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[1] Economic theory provides indices of market power, but these indicators serve as proxies for market dominance, and not as measures of the degree of competition in the market. Furthermore, as is rightly pointed out in Gual et al. (2006, p.14), 'these indicators provide an appropriate measure of power in some markets, but not in others. In a market where these indicators do not properly measure the firm's ability to impose abusive behaviour on others, the competition authority's intervention under traditional procedures is likely to be inappropriate, too harsh in some cases, and too lenient in others.'

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more varied and high-quality products; while on the other hand consumers will take into account things like the kind of labour demands that firms place on the labour market when making their main economic decisions, for example in choosing what education and career to pursue. The process produces a certain final distribution of resources and wealth in society.

Thus, competition should be seen as a process which enables economic players to be more mindful of and responsive to one another's needs and tastes if they want to maximise their own efficiency. This is why competition is crucial, and should certainly be pursued and protected by both market and political authorities.

However, this is all economic theory says about competition, and it is not sufficient to be used as a tangible guide for policymakers and as a standard of behaviour for market authorities.

Let us consider an example. Suppose that firm A is forced out of a certain market due to business strategies implemented by competitors. Should we consider this as a competitive harm or not? In the first case, a competition authority should act in such a way as to keep firm A in business, for example by using subsidies or other industrial policy instruments. In the second case, the authority should avoid any intervention and let firm A exit the market.

The answer, based on the notion of protecting competition, is not obvious. Indeed, on the one hand a larger number of firms in the market certainly reinforces competition among them, and so the exit of firm A may harm competition. On the other hand, the purpose of competition

itself is to push out of the market the less efficient firms; that is, those firms that are less capable of organising a production process and gaining market shares. The exit of firm may be a natural outcome of such a competitive process.

Thus, to make an appropriate decision, the authority should acquire enough information to gauge whether a firm was indeed an efficient firm or not. For example, the authority should be able to assess A's production costs and whether these are too high, compared with what may be expected from previous analyses of that market, or compared with the current production costs of A's direct competitors. However, and unfortunately, this kind of information is generally not available, and as a matter of fact it remains concealed even after long and expensive investigations.

A competition authority that fails to obtain this information, on the other hand, risks keeping an inefficient firm in the market. Such an action would risk *protecting competitors, instead of protecting competition.*

In this report, in contrast, we suggest that the right question to ask is this: has the exit of firm harmed consumers? By harming consumers we mean: has the exit of firm resulted in higher product prices, lower product quality and less product variety, or not?

By asking and finding an answer to this question, the competition authority would not risk protecting competitors instead of preserving competition; it would in fact ensure the well-being of those who would be directly harmed by a potential lack of competition: the final consumers.

The term we use for this criterion is a ‘consumer welfare standard’. We call a competition policy based on such a standard ‘economics-based’.

The reason for using such terminology is simple but very important. With a consumer welfare criterion, competition policy will be grounded in sound economic analysis. In fact, what economic theory can do better is evaluate how an industry, or the economy as a whole, performs in terms of satisfaction of consumer needs; and it can do this independently of the supposed degree of competition which prevails in the industry in question.

This does not mean that economics provides easy and empirically usable measures of consumer welfare, as likewise it does not provide empirical measures of competition. Nevertheless, a large part of economics is devoted to studying the conditions under which practices in the market will harm the welfare of consumers. Therefore, if we decide to follow an economics-based approach, it is these practices that must be sanctioned by a competition authority, and not others. Against this backdrop, economic theory can certainly help to distinguish the business practices which lead to higher levels of consumer welfare from those that may instead harm consumers.

To sum up, an economics-based approach establishes a consumer welfare standard as the main principle for policymakers in the design of competition policy. Such an approach focuses on anti-competitive effects that harm consumers, and is based on sound economic theory.

The final outcome of competition policy, with a consumer welfare standard as a guide, cannot be the protection of

competition per se, nor can it be the protection of competitors. It can only be the protection of the well-being of consumers.

In terms of policy implementation, the economics-based approach suggests that the standard that competition authorities should follow in assessing whether a certain business practice is anti-competitive or not consists in answering the following question: does the business practice harm consumer welfare or not? This is the fundamental question that each competition authority must always bear in mind. If the answer is in the affirmative, the practice should be banned; otherwise, it should be allowed and the competition case cleared.

Unfortunately, the current approach to the application of European competition policy is not economics-based. We study this issue in the next subsection. We present now, as an example, a real case in which a competition decision by the European Commission could have been more informed had an economics-based approach to the case been followed.

Example: A mistaken decision due to a lack of an economics-based approach: The Michelin Case

Under the current EU competition laws, both the European Commission and the European Court of Justice consider the practice of discrimination among buyers by a firm endowed with market power as anti-competitive behaviour. One of the instances in which such discrimination materialises is when a dominant firm offers different terms of trade—for example different prices—to different buyers for the same type of deal: this is price discrimination.

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Currently, a firm which has a certain level of market power and which is caught pursuing such a form of price discrimination would be heavily fined by the European competition authority, and indeed this was the case with Michelin. This company was found guilty of infringing European competition law on two separate occasions, mainly on anti-competitive loyalty discounts and fidelity rebates, which are a form of price discrimination.[2] The Commission declared that Michelin infringed Article 82 by tying in tyre dealers through individual discounts that were based on sales targets.

This decision by the competition authority was entirely based on evaluating the formal commercial aspects of a business practice and condemning it as anti-competitive. Specifically, the practice is the 'offering of different prices to different buyers for the same product', and the approach is that, in a market such as the one in which Michelin operates, this conduct must be sanctioned and forbidden.

An initial problem with this decision lay in the difficulty of proving that the discrimination had indeed occurred. The burden of proof rested solely with the Commission, and proving the infringement in cases of this sort requires a deep investigation and, above all, access to industry information that is practically secret. Indeed, the purchasing contracts between Michelin and its dealers were not written and signed contracts. The terms of trade were simply agreed upon behind closed doors and then implemented by the parties.

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[2] Case 322/81: *NV Nederlandsche Banden Industrie Michelin v Commission* (1983), Case T-203/01: *Michelin v Commission* (2003).

As a consequence, the progress of the investigation by the Commission encountered various difficulties at various stages. For example, the European Court of Justice disagreed on some points and said that the European Commission had not entirely succeeded in showing that Michelin had applied unequal criteria and thereby discriminated against some of its customers.

However, the more important mistakes in this case decision were not juridical. They were economic. In fact, the main shortcoming in this case was the lack of understanding of the economic nature of the problem and of the economic consequences of the authority's decisions.

Let us elaborate on this point. Economic theory shows that a dominant firm may fail to fully exploit its dominant position due to a problem of commitment. Consider for example a dominant producer which, instead of selling its product directly, prefers to sell it to retailers, which then will sell it to final consumers. This was the case of Michelin (acting as the producer), and it is the same with plenty of large producers.

Suppose that the producer agrees to sell its product to a first retailer at a certain price. The producer is uncertain about the effort that the retailer will exert in selling the product, for example in advertising it or in exposing it properly to customers in an outlet. Thus, and in order to induce the retailer to behave in the producer's best interest, the producer will put the retailer in competition with a second retailer after a while. A second retailer will only agree to compete with the first, which already has the product on the market and thus has a competitive advantage, if it can

buy the product from the producer at a lower price than that paid by the first retailer.

This reasoning means that the producer has, at a certain point in time, the convenience of offering the product to a second retailer at better contractual terms than those applied to the first retailer, namely at a lower price. That is, the dominant firm will find it very profitable to price discriminate among possible retailers of its product, exactly as Michelin did.

In other words, the dominant firm may not be able to commit, with the second retailer, to the terms of trade negotiated with the first retailer. The first retailer understands that the producer runs into this commitment problem, and once a lower price is agreed with the second retailer, the first retailer will necessarily ask the producer for a renegotiation of its terms of trade. This same argument continues with the inclusion of a third retailer, and so on.

As a consequence, the producer's commitment problem, which translates in practice into price discrimination over its retailers, yields a lower buying price for all retailers, and this lower buying price is passed on to final consumers as a lower selling price, with a consequent positive effect on consumer welfare.

If a competition authority forbids the dominant firm, in this context, to price-discriminate over retailers, as in the Michelin case, the authority essentially solves the commitment problem of the dominant firm, allowing it to exert in a more effective way its market power by never lowering prices to subsequent retailers, hence procuring a competitive harm to consumer welfare.

In an approach to competition policy based directly on the evaluation of the harm to consumer welfare, instead of on the commercial form of the producer practices, such a misguided decision by the European authorities would most probably not have been taken.

3.2 Main features of the economics-based approach

We note that, sadly, the use of a consumer welfare test is not the current standard practice in the application of competition policy. We illustrate in this subsection the most relevant features of the economics-based approach, and contrast them with the current approach to competition policy. In particular, we identify those general aspects of the economics-based approach which can be more useful in assisting policymakers in both addressing policy design and giving suggestions to authorities.

Consumers at centre stage

A main advantage of the economics-based approach is the fact that imposing consumer welfare as the main criterion for public intervention in the economy would in fact rationalise and reorganise public intervention, making it more attentive to consumer demand, less costly for public institutions and more efficient for society as a whole. Let us consider why this is the case.

Currently, competition policy is managed on the basis of a checklist approach. In such an approach potential anti-competitive behaviour is classified into a list of categories of conduct, such as predatory pricing, various

forms of discrimination, targeted rebates, tying, bundling, exclusionary contracts and market foreclosure, to give some common examples.[3]

With such a list at hand, competition authorities verify (I) whether the firm is dominant or not in its market, and (II) whether the firm exercises or not some of the practices in the checklist. If the answer to both questions is in the affirmative, the firm is fined and forbidden to continue with the practices. If the answer to one of these questions is negative, the competition case is cleared.

Condition (I) is reasonable and economically sound. For example, it is not harmful for the internal market of the European Union if a small, local grocery store practises some form of rebates targeted to customers of a nearby rival small store, even though this behaviour may be illegal under national jurisdiction. In general terms, the following guideline applies: if a firm is small, it is believed that it can cause only minor competitive harm.[4]

The main issue with the checklist approach is represented by condition (II): the very use of a checklist. The problem is that different practices can well serve the same anti-competitive purpose. For example, predatory pricing can

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[3] All these cases of potential anti-competitive practices will be treated in more detail later on in this report.

[4] This is also the view taken by the European Court of Justice in the so-called *de minimis* doctrine, later adopted by the Commission as well (see EC, 2001), and under which those firms that are small in size or that have only a small share of the market are generally cleared from anti-competitive allegations. The de *minimis* doctrine yields also special protection for small and medium enterprises in Europe, for example by providing state aid to certain Member States under some circumstances.

take the form of offering lower prices to competitors' customers (price discrimination), or of offering fidelity rebates that are formally available to all, but which are in fact tailored to the specific needs of a competitor's customers. The predator can also engage in the tying and bundling of products whenever a competitor's customers are particularly interested in the products in question. A firm that wants to foreclose a market may refuse to deal with other firms or may in addition establish exclusive dealing arrangements with other firms.

However, under the checklist approach all the aforementioned activities are in principle considered to be different practices. The end result of this fact is that there are three different negative consequences for the application of competition policy:

1. First, different practices receive different treatments according to different case law traditions, different jurisdictions and even different national law standards, with some practices possibly thriving under a relatively more permissive attitude than others, in spite of the fact that they serve the same anti-competitive purpose. This fact makes competition policy less predictable, with a consequent damage to the normal business activity of firms.

2. Second, a company that has been caught carrying out a certain practice may well shift to a second, different practice that entails the same anti-competitive purpose and that differs from the first only in terms of legal details and features (this has been the case, for example, with Michelin). With the checklist approach, a new competition case has to be opened against this firm, which may then shift again to a third practice which again serves the same purpose.

Therefore, as a result of using a checklist approach, competition cases tend to last longer and use up more resources from competition authorities. Furthermore, the checklist used by competition authorities will never be complete, and new anti-competitive practices may always be invented and implemented by firms.

3. We now come to the third and perhaps most negative consequence. If a firm can pursue the same anti-competitive end by using a variety of business practices which are treated and sanctioned differently, this allows the firm to choose which practice to follow in order to minimise the risk of being caught and, eventually, to receive the lowest possible fine. Thus, a checklist approach allows firms to use arbitrage among different practices and among different jurisdictions in order to pick the practice that entails the lowest risk of being judged by a court. Furthermore, firms will have a strong incentive to look for practices that have not yet been formally banned or that are still not present in the checklist. In other words, the checklist approach has the consequence of signalling to firms which is the 'best way' to violate competition according to the anti-competitive result that they want to achieve.

In contrast, the economics-based approach ensures that different business practices will be treated consistently when they are adopted for the same anti-competitive purpose. Specifically, two different business practices harming the welfare of consumers in a comparable way will be treated similarly, independently of their business and legal forms. By doing so, the three negative consequences considered above with respect to the checklist approach will not materialise and, at the same time, consumers will be more protected. Let us consider how this will be the case.

1. The predictability of competition policy will increase, because policy will be based on a common, sound and unifying principle known to all market actors: the protection of consumer welfare.

2. There will be no need to continuously expand the checklist list with new suspicious practices, because in the economics-based approach only the effect on consumer welfare matters, not the commercial forms of the practice itself. An enormous variety of potentially anti-competitive conducts will be grouped into much broader classes according to the effect that they have on consumer welfare, this effect being suggested by economic theory. Competition policy will be, in this respect, simplified and will be applied more rationally and more effectively, with a much clearer concern for protecting consumers.

3. Finally, and even more importantly, within the checklist approach firms will continue to have an incentive to shift from one business practice to another for the purpose of lowering the probability of being caught by competition authorities. However, if competition policy follows an economics-based approach, firms will be led by the structure of competition policy itself to choose the practices that pose the least harm to consumer welfare, and not to choose those that are simply more difficult to detect or apparently less anti-competitive due to their commercial form. An economics-based competition policy will give the right incentives to firms to protect consumers.

To summarise, the consumer welfare standard establishes a common foundation for assessing the potential harmfulness of an enormous variety of business conducts; conducts which are currently judged on the basis of their

legal differences instead of on the similarity of their economic consequences for the well-being of consumers. In doing so, the economics-based approach makes competition policy more predictable, more consistent and better organised, and above all it puts the protection of consumers definitively and legally at the centre of the action, and gives the right incentives to firms to be responsive to consumer demand in their search for economic efficiency and profits.

A competition policy that fosters economic efficiency and growth

The fact that, with the economics-based approach, business practices are evaluated by competition authorities in terms of their harm to consumer welfare has an important implication: the same practice will be treated differently whenever, in different contexts, it yields different consequences for consumer welfare.

A natural effect of the economics-based approach consists of giving more attention to the general economic context in which a business conduct occurs. This, on the other hand, is an important feature of an efficient competition policy. In fact, a given business practice may harm consumers in one economic context, while the same practice may be beneficial to them in another. In the first case, the business practice should be sanctioned by the competition authorities, whereas in the second case it should be allowed.

Let us consider, for example the relation between market power and firms' incentives to innovate. This relation is not unequivocal. The economic literature points out that the impact of market power on innovation depends on the

market in question (see, for example, Aghion, Bloom et al. 2005; Aghion, Dewatripont and Rey 1999; and Scherer and Ross 1990). Let us elaborate on this. It is well known that innovation is costly. But most of all, the results of research and development activities by firms are largely unpredictable at the time of starting out. In economic terms, in order to innovate, a firm must bear large fixed costs which generally yield uncertain returns. Examples of these costs may be the setting up of advanced laboratories, the acquisition of new technologies or the hiring of new researchers. There is thus a fundamental condition that must be fulfilled for any firm to innovate: the firm should be reasonably confident of being able, whenever the innovation activity bears fruit, to appropriate the related profits. No innovation would ever occur in the market without this prerequisite.

Suppose now that a firm has invented new technology. In order to fully appropriate the revenues associated with this innovation, the firm will need to have some market power over the use of the technology itself. In other words, the firm should be the only market actor able to use or sell the new technology for a sufficiently long period of time. The firm may try to gain this market power in a variety of ways: for instance, it may patent the innovation whenever this is allowed, and thus receive exclusive rights for its use; it may refuse to sell to competitors the new technology it has invented; or it may establish exclusive contracts and relations to provide the new technology only to a restricted number of other market participants.

The last two practices are exclusionary and anti-competitive in nature, and would be liable to be condemned by a court under a strict checklist approach. However, in an economics-based approach, these practices may be

allowed if, in the market in question, they enable the fulfilment of the necessary conditions to innovate, and hence will foster economic growth and increase consumer welfare in the long term. Of course, were the market different, for example, were the market a mature one in which no profitable innovation would normally emerge, the practices above could not be justified on the basis of innovation-fostering, and the economics-based approach would suggest scrutinising the possibility of harm to consumers.

The economics-based approach, contrary to a checklist approach, would lead authorities to examine the market context in which an allegedly anti-competitive business practice occurs, and would lead to the different treatment of the same practice in substantially different market contexts. This observation makes clear that a main feature of the economics-based approach is not to prevent the authorities from discriminating among business conducts by firms. On the contrary, authorities must discriminate, but based on the right economic principles and always with consumer welfare in mind.

Summing up, competition policy will discriminate not on the basis of the commercial form that business practices take, but on their impact on consumer welfare in different market contexts, assessing in addition this impact in the foreseeable future. Hence, the economics-based approach does not allow for any prior presumption about the potential competitive harm of business conducts. It is only the effect of these conducts on consumer welfare that matters. As a result, firms will be free to choose the most profitable practice under the single constraint that it does not harm the welfare of consumers. This will promote economic efficiency and growth to the benefit of consumers.

A competition policy that keeps the lobbying processes in balance

It is acknowledged that firms have an informational advantage over competition authorities and policymakers in terms of the structure of their markets and of the relative efficiency gains associated with their business strategies (see, for example, Besanko and Spulber 1993). In lobbying competition authorities, one main objective of firms consists essentially of making the authorities appreciate the information given by the firms in relation to the markets in which they operate, and in relation to their business strategies in these markets.

It was said previously in this report that only large companies—those that represent a large share of their core market—are suitable to be scrutinised in competition cases. This is true both in the current checklist approach and in the economics-based approach to competition policy. It is, however, also known that large companies are generally better organised and acquainted with competition cases than consumers, and hence competition decisions may tend in some cases to be influenced by corporations and bigger companies, through the lobbying process, more than by consumers (see, for example, Neven and Roller 2002).

Against this backdrop, adopting an economics-based approach may help to balance this difference in access to the lobbying process by different stakeholders. We are not suggesting that consumers should organise themselves better in order to interact more systematically with institutions. It is left to the free will, general interest and potential ability of consumers to act in this sense. On the

contrary, what we would like to point out is that, once the general satisfaction of consumer welfare has been set as the main criterion for the application of competition policy, it will be a general responsibility of policymakers and a statutory responsibility of competition authorities to take the interest of consumers into account.

In summary, the economics-based approach to competition policy would help keep the lobbying processes in balance by making competition authorities more responsive to consumer demand when confronted with the lobbying pressure of firms and corporations.

A subsidiarity principle: Competition policy should not do what markets can do better

The economics-based approach is based on and grounded in economic analysis, and it is well known that economic analysis identifies the market as the most effective institution to organise the economic activity of society.

While this general principle may be subject to discussion in a checklist or case law approach, it remains an unwavering guideline in the application of competition policy based on the economics-based approach. The role of competition policy should primarily entail the banning of business and commercial practices which are deemed to be harmful to the welfare of consumers. Competition authorities should not address the problem of suggesting directly what practices to adopt. The powers of competition authorities are in some ways negative powers, powers to forbid, rather than direct positive powers, such as suggesting or determining the course of market actions. Let us consider an example.

Suppose that a market has a monopolistic or oligopolistic structure. There are cases, well identified in economic theory, in which this market structure depends heavily on the business practices of the incumbents which are essentially aimed at keeping potential competitors out of the market. For example, in recently liberalised monopolies such as the energy and telecommunications industries in Europe, the former monopolists tend to preventing rivals from using essential infrastructure needed to exercise their economic activities, hence keeping them out of business.[5]

In such cases, and upon having previously established that entry of competitors into the market would increase consumer welfare, competition authorities may consider intervening to ban the foreclosing practices and help competitors to enter.

At the same time, there are other cases in which the barriers to market entry can be essentially attributed to the dominant position gained by an incumbent firm for the sole fact that it is more efficient than any other competitor. The incumbent, in such cases, would have gained its market position through efficient and perfectly pro-competitive business strategies. A competition authority which follows an economics-based approach should not intervene at all to alter this situation, even if the entry of new competitors is not on the horizon, or may indeed take a long time to happen. The authority should leave the market to decide if, and when, competitors will try to enter. Competition policy should not do what markets can do better.

To sum up, the economics-based approach supports the view that competition in itself is the best social mechanism to

[5] We will examine these cases in more detail in the follow-up of this study.

promote efficiency, and takes a further step towards identifying a welfare criterion to concretely shape this view and translate it into a usable guide to policymakers and authorities. This approach does not call for a more dirigiste competition policy; it calls for a more efficient competition policy.

The Rule of Reason and the Burden of Proof

We conclude the analysis of the economics-based approach to competition policy with the description of some of its consequences for the progress of competition policy.

In both a checklist approach and a more economically oriented view, the procedures of competition policy may involve the laying down of a rule of reason or of a per se rule, or of a certain combination of the two. A per se rule consists of an ex ante description of what is banned. A rule of reason consists in an ex post evaluation of the consequences.

Consider, for example, the case of the tying of products. In an economics-based approach, tying should be evaluated on the basis of its effect on consumer welfare. We have seen before that this standard would lead authorities to consider the circumstances under which tying occurred, the market in which it occurred and the nature of the firm that allegedly practised it. Consequently, the economics-based approach naturally leads to a rule of reason procedure.

On the other hand, under a per se rule, tying would be considered as a separate offence and forbidden as such. However, as economic theory clarifies,[6] it is a conceptual

[6] See Tirole (2005) for a wide-ranging discussion of this.

mistake to consider tying as separate offence. In fact, tying is but one of the many strategies used by corporations to impose their products on the market. As such, it may potentially hurt consumers and be utilised to prey on competitors. Hence, competition authorities, even under a per se rule, should assess tying within the more general framework of predatory market conducts.

In summary, the economics-based approach naturally leads to a rule of reason procedure for competition policy, while at the same time it strongly discourages the adoption of per se rules. In addition, the suggestion for the burden of proof in competition cases is also clearly laid out. The economics-based approach requires the verification of harm to the welfare of consumers. In a concrete case, the competition authority has to prove that such harm effectively occurred, while the suspected firm should provide arguments to sustain that its behaviour was instead pro-competitive. However, the latter cannot be pursued on the basis of previous case law evidence. On the contrary, sound economic theory and empirical evidence should be provided.

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4 The implementation of competition policy: Suggestions for authorities

In this section we propose, based on the economics-based approach analysed in the previous section, various general suggestions that policymakers could give to competition authorities in order to allow them to implement competition policy consistently and effectively.

It should be stated that economic theory does not yet provide a general theory of the implementation of competition policy. As stated by Rey (2003, p.6), ‘compared with regulation theory, the theory of competition policy is still in its early stages of development, with little attention devoted to implementation issues.’ See also Vickers (2005) on the implementation and enforcement of competition policy.

Notwithstanding, the economics-based approach to competition policy provides some general insights which can help competition authorities deal with some of the more troublesome and difficult-to-detect anti-competitive practices: so-called exclusionary practices.

Exclusionary practices are business and commercial activities put in place by a firm with the intention of keeping potential competitors out of its own market, or with the intention of forcing them out of the market after they have entered it.

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Suppose for example that an incumbent firm fears that, in the near future, a competitor may enter its market. If the competitor enters, the two firms will compete by offering to customers the lower price for the product. Faced with this new competition, it is a sound business strategy for the incumbent to cut drastically its price today, even well beyond the production cost. This is because the competitor, observing the drastic price reduction by the incumbent, understands that, upon eventually entering, it will be forced to offer customers a very low price as well. This reduces the revenues that the competitor expects to earn upon entering, and in doing so reduces the profitability for the competitor to enter the market in the first place.

As a result, if the initial price reduction by the incumbent is sufficiently strong, the competitor will not enter the market at all. This would be a typical case of predatory pricing.

But the incumbent may also resort, in addition or as an alternative to predatory pricing, to a variety of non-price exclusionary strategies. For example, if the competitor has already entered the market, the incumbent may offer very attractive and selective rebates to the customers of the competitor. The incumbent does this in order to lower the competitor's share of market demand, and hence the profitability of his remaining on the market. This would be a typical case of indirect price discrimination.

The incumbent may, moreover, bundle or tie products, refuse to supply essential facilities to the competitor or keep it out of business by means of exclusive contracts with retailers. The incumbent may also adapt its general investment strategy for the sole purpose of discouraging rivals to enter or stay in the market. It may, for example,

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overinvest in capacity, hence flooding the market with production, or in quality and brand diversification, hence leading to excessive product proliferation.

A competition authority dealing with any exclusionary practice needs to deal with two general problems, which also correspond to the two main arguments that firms use in general to defend their market behaviour in an antitrust case. We have already encountered these problems in the course of this study, and now describe them below.

Problem 1

It is often not easy to distinguish between an exclusionary business practice and a practice that results from normal competitive behaviour in the market. For example, an efficient firm with sufficient understanding of its business may want to cut prices—even temporarily below production costs, hence incurring losses—because it wants to adopt a new production technology that requires selling to a larger market share in order to be profitable. A drastic temporary price cut in this scenario is normal competitive behaviour. Furthermore, a firm may want to renew its investment effort in production capacity, or differentiate existing products, or produce new products, or tie products with other existing products in the market; again, under certain circumstances, normal competitive behaviour.

The general but subtle question that an authority needs to answer is the following: is the firm's practice aimed at increasing the firm's revenues, or is it mainly aimed at causing losses among competitors to force them out of the market, maybe even at the cost of incurring losses to the firm itself?

More specific questions, related to specific practices, may be these: Is a price reduction excessive when compared to the possible reduction coming from normal competitive behaviour in the market? Is the degree of product differentiation excessive and confusing to customers? Is the tying of products detrimental to competition? In other words, is the business practice in fact exclusionary?

Problem 2

Some practices, though undoubtedly having exclusionary undertones, may have a potentially beneficial effect on consumer welfare. After all, lowering prices and increasing product variety and quality means offering better terms to customers. Hence, even assuming that some exclusion of competitors is indeed taking place, is it not possible that the final effect on consumer welfare could end up being positive? In other words, should the practice be allowed on the grounds of a consumer welfare test?

One of the main advantages of a sound economics-based approach to competition policy is the fact that it can help authorities deal with the two problems mentioned above; that is, it can answer the questions that the problems imply. Of course, the same would not be possible with a checklist-based case law analysis.

In order to analyse how the economics-based approach can help authorities deal with the two questions raised above, it is useful to reorganise exclusion into three broad categories.[7] The classification is based on the economic

[7] We follow here the same classification adopted in Gual et al. (2006).

finding that a firm putting into place an exclusionary practice does not necessarily need to do this in its core market. It may prefer, for many reasons, to act anti-competitively in markets which are different from but closely related to its main market.

As such, exclusion can be divided into different types: a) internal exclusion, or exclusion within the main market; b) horizontal exclusion, where a firm tries to damage competitors which are active in a market different from but related to the firm's main market; and c) vertical exclusion, where exclusionary practices take place at different stages of the production process. We deal with these forms of exclusion, and with the suggestions for authorities that the economics-based approach to competition policy entails in the three cases, in subsections 4.1, 4.2 and 4.3 respectively.

Of course, a competition authority is not expected to know in advance which kind of exclusionary practice is occurring. In the absence of this knowledge, the authority should take into consideration all the suggestions that we propose in the three subsections.

Each subsection starts with a definition of the type of exclusion concerned, includes examples, continues with the suggestions that policymakers could give to competition authorities in order to approach the implementation problem for the exclusionary form under consideration and ends with a brief look at the economic theory supporting the arguments that we have provided in that subsection.

4.1 Dealing with internal exclusion from the market

What is internal exclusion? The issue of identification of the 'main market'

In internal exclusion, an incumbent firm tries to discourage competitors from entering its main market, or to force them to exit it. In doing so the main purpose of the incumbent, as we pointed out in the description of Problem 1, is not to increase its profits, but to protect itself from competition by other firms in the market.

The business practices that can serve this purpose are potentially all the exclusionary practices listed at the beginning of this section, such as predatory pricing, targeted rebates and other forms of price discrimination, market foreclosure, tying and bundling of products, exclusive dealing contracts, product and brand proliferation and so on.

The definition of internal exclusion does not present conceptual difficulties per se, contrary to the cases of horizontal and vertical exclusion. Of course, assessing whether a certain practice is exclusionary or not does yield many conceptual and practical difficulties, the main of which being those that we stated previously as Problem 1 and Problem 2. However, these are problems related to the practices, not the notion, of exclusion itself.

Perhaps a main issue in the definition of internal exclusion, and one with major practical implications for the concepts of horizontal and vertical exclusion, is the notion of a firm's main market.

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In the practical application of competition policy, for example in assessing if an announced merger may have anti-competitive effects, the identification of the relevant market is a crucial step. Indeed, a merger case always starts with a first phase in which the relevant market in which the merger is going to occur is identified, and then continues with the evaluation of the market power that the ongoing merged entity would enjoy. If this market power is above a certain threshold, the merger will not be authorised. Of course, the larger the market, the less the market power of the merged entity will be. That is why market identification is a crucial step in merger cases.

In an internal exclusion scenario, as is generally the situation in merger cases, the definition of a firm's main market should conform, whenever possible, to a 'hypothetical monopolist approach'.

This approach is based on the consideration that an exclusionary strategy, if successful, will allow a firm to exert a certain degree of market power, generally by raising the prices of its products. Hence, when trying to assess either conceptually or in a concrete competition case what is the firm's main market, one should ask: what is the largest market in which the firm would be able to considerably raise prices without losing a consistent fraction of its revenues? In other words, what is the firm's main market where the firm is already a monopolist?

This is the market in which, by succeeding in the exclusion of competitors, the firm will damage consumers. Hence this is the relevant market for policy analysis.

Suggestions for authorities

A main finding in the economic literature, and the one which helps to address Problems 1 and 2 of this section, is that for exclusion in the same market, exclusionary behaviour has a precise two-phase structure, which can be described as follows.

In the initial phase, the incumbent acts very aggressively to reduce the expected profitability of competitors from entering or staying in the market. In this phase one generally observes, on the part of the incumbent, strong reductions in product prices, product and brand proliferation, offers of new varieties of existing products and a renewed advertising effort. One also generally observes in this first phase legal actions on the part of the rivals against refusal to supply and against exclusive dealing contracts put into place by the incumbent.

In this first phase, the terms of trade offered by the incumbent to customers generally improve, because the incumbent offers customers the opportunity to buy at lower prices and offers them more product variety. Hence, in the first phase consumer welfare generally increases.

However, the entry-deterring actions taken in the first phase by the incumbent reduce its profits: the incumbent sells at lower prices a potentially wider variety of products. In other words, the incumbent, being a well-established firm in the market in question, can well afford to incur losses if it means preventing a competitor from conquering part of its market share.

But once the incumbent succeeds, totally or partially, in getting rid of the competitor, it will be free to use its regained

market power to increase its profits again. Thus, it will decide to recoup its losses from the entry-deterring strategies. A second phase now begins, where the incumbent sets prices back to their initial level or higher, and reduces investments in production capacity, variety, quality and advertising. In this phase the terms of trade offered to customers worsen drastically and consumer welfare decreases.

What is the overall effect on consumer welfare of the exclusionary behaviour of the incumbent? Of course, this can only be assessed on a specific case-by-case basis. But while the aggressive phase, being costly for the incumbent and meant exclusively to discourage the new entrant, will generally last for a short period of time, the recoup phase will generally last longer, since it is more rewarding for the incumbent and no competitors are on their way to threaten the incumbent. Hence, after a relatively short period of harsh competition and low prices, a longer period of high prices and low competition will follow.

As a result, once exclusionary behaviour has been correctly understood as being composed of two different phases, and once both phases are taken into account, the economics-based approach suggests that, other things being equal, the overall effect of exclusionary behaviour on consumer welfare is negative. This addresses Problem 2.

Furthermore, while the incumbent’s actions in the first phase are due to the arrival of a new entrant on the market, in the second phase all the incumbent’s actions rely solely on its renewed market power. Therefore, once we take both phases into account, the economics-based approach suggests that there is no sound justification for the

incumbent's actions solely in terms of normal competition in the market. This addresses Problem 1.

It is worth remarking that, in the example under consideration, the economics-based approach has a sound result on the concrete application of competition policy. If an antitrust case is opened against an incumbent firm during the first phase of its allegedly exclusionary behaviour, it may be easier for this firm to show that its actions are indeed improving consumer welfare, rather than the contrary. This is also a normal response to the arrival of a new market participant. However, in the following second phase—the recoup phase—the incumbent will not be able to justify such arguments.

A competition authority should be willing to monitor such an industry for a while, to see whether and when a recoup phase begins, before reaching any conclusions. In this sense, the competition authority should behave more like a regulator, trying to establish a prolonged and more continuous monitoring activity on the economy.

In fact, long-term and far-reaching experience and economic knowledge of any particular industry sector is absolutely necessary in order for the competition authority to be able to judge on a case-by-case basis in that particular industry. As this longer-term economic view is not yet fully in place, we encourage both national competition authorities in Europe and the European competition authority to engage in continuous monitoring, better assessment and crucial exchange of valuable market information in order to avoid harmful exclusionary practices in the different industry sectors in the first place.

The economics of two-phase exclusionary practices

We give here an account of the economic theory leading to the conclusion that exclusionary behaviour has a two-phase structure. We do not aim to be exhaustive, but instead to present some sound academic research that supports our previous discussion.

A first important insight from economic theory is that, in order for exclusionary behaviour to take place, market participants must have differing levels of access to the relevant information—for example, access to information about a market's parameters or an opponent's characteristics—a situation that is called 'asymmetric information'. Hence, in a market where all the relevant information is publicly available, or available at least to the interested players, no exclusionary behaviour can occur. Exclusion is essentially a matter of asymmetric information.[8]

However, it is important to note that it is not possible to avoid exclusionary behaviour by trying to make information more easily accessible. Indeed, as it is clear in contemporary microeconomics, informational asymmetries plague almost any kind of economic relations (Stiglitz 2001), and there is no way for institutions, including competition authorities, to fully eliminate this problem.[9] Therefore, in concrete markets, asymmetric information, far from being the exception, is the rule.

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[8] This insight comes, in particular, from game theory literature; see Selten (1978).

[9] This does not mean that institutions cannot deal with the problem. They simply cannot eliminate it. A fundamental branch of modern economics, called the 'economics of information', studies what the consequences of the information problem are, and what remedies can be adopted against it. The economics of information is in turn subsumed into a branch of game theory, called the theory of 'games with communication'.

This said, the relevant phenomena that explain two-phase exclusionary behaviour can be classified into three wide groups (see Gual et al. 2006; Motta 2004): 1) reputation effects; 2) signal-jamming effects; and 3) financial market effects. We briefly describe each one of them below. The third one involves the role of banks and financial institutions in leading, possibly, to anti-competitive practices by firms.

In the reputation effect scenario, as presented in Kreps and Wilson (1982), the competitor is not well informed about the reaction that the incumbent may have once the competitor enters the market; say, an aggressive reaction or an accommodating reaction. On the other hand, the incumbent is of course aware of this lack of information on the part of the new entrant. In this situation it is in the best interests of the incumbent to establish a reputation for being aggressive, in order eventually to make the competitor leave the market, or to discourage entry in the first place. Thus, the incumbent immediately fights the attempt by the competitor to enter, for example by drastically cutting its prices. This is the first, aggressive, phase.

The result of the aggressive behaviour of the incumbent is that the entrant leaves the market, or is forced into a passive position. The incumbent then has every incentive to recoup the losses incurred in the aggressive phase due to its price cuts. Now it drastically re-raises its prices, and the second phase begins.

It is worth noting that the incumbent would behave as described above even if there was a real benefit in accommodating the entrance of the competitor. For

example, if entry occurred during a prolonged period of market turbulence and low sales, the incumbent may not be willing to incur further losses by fighting the entrant aggressively. However, it recognises that the pay-off associated with building an aggressive reputation more than compensates for the initial losses. Thus, by exploiting the lack of information on the part of the new entrant, the incumbent will effect exclusion.

In the signal-jamming scenario, as studied by Fudenberg and Tirole (1986), the competitor is not well informed about fundamental parameters which influence the profitability of operating in the market, for example, the level of customer demand. The competitor would acquire this information only after entering the market. The incumbent understands this and, after the entry of the competitor, cuts prices so as to make its relative market share increase and leave weak demand for the competitor, thus communicating a bad market signal. The competitor, in turn, understands that its demand is low due to the artificially low price that the incumbent is offering, but nevertheless continues to have no clues about the normal level of demand. At a certain point, unless it is able to stay in the market with reduced sales for a long time, the competitor will exit. The recoup phase by the incumbent then begins.

The financial market scenario, as is developed by Bolton and Scharfstein (1990) and Holmstrom and Tirole (1997), is a little more complex. The starting point is that, in order to enter a new market, a firm generally needs to borrow money to compete with a well-established incumbent. The financial institution granting a loan to the entrant needs to deal with the risk that the entrant may fail to conquer a significant market share, and thus not be able to pay back the loan.

The burden of asymmetric information here is on the financial institution, which cannot know the effort that the entrant will exert in competing with the incumbent, the efficiency of both the entrant and the incumbent, or the relevant market characteristics.

As an indicator of these unobservable parameters, the financial institution generally has no other option than to take the competitor's market performance after entry into account. If this performance is not good enough, the financial institution will be less willing to finance the entrant in the following phases.

Understanding this, the incumbent will adopt aggressive behaviour so as to induce the poor market performance of the entrant, thus reducing the entrant's ability to raise the financial support needed to continue competing in the market. This will force the entrant into a much weaker position with respect to the incumbent, and a recoup phase will finally start with the incumbent again worsening the terms of trade offered to customers, in order to recoup its losses from behaving aggressively in the initial phase.

4.2 Dealing with horizontal exclusion from the market

What is horizontal exclusion?

Two markets are said to be horizontally related, or adjacent, if two conditions are met. First, the two corresponding products are sold to final consumers (this is the main difference with vertical relations between markets, as will be explained in the next subsection). Second, the competitive conditions in one market depend on those in the other

market. Horizontal exclusion is a type of exclusionary behaviour that can be implemented by firms which operate in different adjacent markets.

Specifically, in a horizontal exclusionary practice a firm adopts non-competitive business strategies not only, or not necessarily, in its main market, but also in markets horizontally related to the main market, but still with the intention of preventing entry into the main market.

As is clear from the definition, horizontal exclusion may be difficult to grasp and detect, and the identification of this form of exclusion constitutes, by itself, an important contribution of economic theory to the application of competition policy. Before proceeding with the analysis of how an economics-based approach to competition policy can help authorities deal with Problems 1 and 2 in this scenario, we present an example to elucidate the concepts involved in horizontal exclusion.

Example: US vs Microsoft

In May 1998, the US Department of Justice and a group of US states filed separate complaints accusing Microsoft of abuse of a dominant position in the market for web browsers, at the expense of its main competitor, Netscape Navigator.[10]

We do not aim here to present a full description of the case, nor do we aim to give in detail an exhaustive

[10] Microsoft has also been involved in an antitrust case in Europe, but the two cases are different and the European case is not suitable for use as an example for our purposes here.

chronology of the main facts.[11] Instead, we reinterpret part of the allegations so as to elucidate the main ingredients in the practice of horizontal exclusion.

Microsoft's core market is that of operating systems, where it has a dominant position by producing Windows. A horizontally related market is that of software programs, for example web browsers, where Microsoft operates as well by offering its browser, Internet Explorer (IE).[12]

At a certain point, by putting into place a variety of business practices, Microsoft gained a dominant position in the adjacent market of web browsers as well. These business practices consisted for example of prohibiting equipment manufacturers from removing desktop icons, folders and start-menu entries which were related to IE, and of excluding IE from the utility called Add/Remove Programs in Windows 98. Furthermore, Microsoft also offered very strong incentives to internet providers in order for them to favour IE over Netscape Navigator.

All of these practices were found to be anti-competitive by the US Court of Appeals, in accordance with Section 2 of the Sherman Act.

But why did Microsoft act in such a way in the web browser market? Certainly not because it was interested in

[11] A full presentation of the facts can be found in Motta (2004).The case was opened during the Clinton administration, and closed with a settlement during the presidency of George W. Bush. The Department of Justice held different attitudes in the case during the two different administrations.

[12] For simplicity of exposition we have chosen to be imprecise here. What we call software programs should more properly be called 'middleware products'.

the market of web browsers per se. The answer is that web browsers, as well as software programs in general, constitute a technological basis for writing and developing hundreds of compatible software applications. Today, the web browser is a program used by almost all buyers of a personal computer, and therefore software applications based on compatibility with the web browser are addressed potentially to all buyers of personal computers.

However, Netscape Navigator is a software program which is written for, and hence usable with, multiple operating systems, not only with Windows. By allowing the wide use of Netscape, Microsoft would have allowed software developers to write a great number of software applications addressed to all buyers of personal computers and, above all, compatible with operating systems alternative to Windows.

Microsoft was not interested in being a monopolist in the market of web browsers. All of the anti-competitive practices exerted on that market had the intention of establishing an extremely strong form of product tying of IE with Microsoft's main product, Windows. By gaining a monopolist position in the market of web browsers—an adjacent market to its core business—Microsoft was protecting itself against entry of competitors in the operating system market—its core market. This constitutes exactly a practice of horizontal exclusion.

Suggestions for authorities

We now proceed with the analysis of how the economics-based approach to competition policy helps authorities to deal with Problems 1 and 2 of this section. The main

contribution of the economics-based approach here relies on the fact itself of having defined the concept of horizontal exclusion.

With respect to the problem of evaluating if anti-competitive behaviour effectively occurs (Problem 1) the economics-based approach yields a clear suggestion: the exclusion practices undertaken by the incumbent may be horizontal. Hence, operationally, the entire network of markets which are adjacent to the market under scrutiny must be identified and taken into account by the competition authority.

We have here a strong prescription for competition authorities: in a competition case, where a firm is allegedly accused of behaving anti-competitively in its main market, the authority should not only assess whether the actions of the firm lead to exclusion in its main market, but also if its actions lead to exclusion in relevant adjacent markets; this is because it may well be the case that the strategy for deterring entry in the main market consists, for the firm, in behaving anti-competitively in adjacent markets.

As a consequence, for a firm operating in different horizontally related markets, a defensive argument could be that its behaviour in its core market stays competitive. However, we have now seen that this statement might not constitute enough evidence against an anti-competitive behaviour: the behaviour of a firm in relevant adjacent markets should also be scrutinised by the competition authority.

This extension of the focus should be made independently of whether the case has been initially opened

with respect to the main market or with respect to a related adjacent market, as it was in the Microsoft case. It is a matter of properly defining the correct notion and procedures for market identification (see the section on internal exclusion) in such a way as to consider horizontal relations properly.

This last suggestion may admittedly be seen as a somewhat complicated issue, and one that calls for further debate and elaboration. Notwithstanding, it is a natural consequence of a sound economics-based approach to competition policy. Whenever legal practices oppose such an extension of the notion of market identification in competition cases, the law should be reformed in order to allow for a wider and more efficient approach by competition authorities.

With respect to the problem of evaluating the final effect on consumer welfare of an alleged anti-competitive practice (Problem 2 of this section) the economics-based approach of horizontal exclusion suggests the following: once it is understood that incumbents can defend dominant positions in a core market by implementing anti-competitive behaviour in different but related markets, the suggestion for authorities is to assess a possible decrease in consumer welfare not only in the core market, but also in the related markets where the horizontal anti-competitive behaviour may indeed occur.

This is important in order to avoid long-term damage by anti-competitive behaviour to consumers and citizens alike, avoiding the distortions brought about by first and second phase exclusionary behaviour by incumbents as described above.

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The Economics of horizontal exclusion

The economic literature that identifies and studies horizontal exclusion is recent but well-established, and identifies the tying and bundling of products as a main business practice which potentially leads to horizontal exclusion.

We present here some of the economic theory which identifies and explains horizontal exclusion, with no claim to being exhaustive. Instead, the intent is to present some ground-breaking academic research that supports our previous discussion.

In Choi and Stefanadis (2001) an incumbent firm is dominant in two adjacent markets, say *A* and *B*, each one requiring a considerable initial effort from the competitor to enter.

If the dominant firm succeeds in tying the two products, a competitor entering in only one of those markets, say *B* , will suffer from a very low level of demand. In fact, a major share of production in market *B* is sold—within the tying arrangement—in association with the production in market *A*. Thus a competitor wanting to enter *B* should also try to enter market *A*, thus duplicating its entry effort. On the other hand, this will of course make entry less profitable.

In this scenario, and by tying products, the incumbent firm makes it more difficult for a potential competitor to enter any of its core markets in isolation.

In Carlton and Waldman (2002), on the other hand, an incumbent firm is initially dominant in market *A* only, and *B*

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is a complementary market. We recall that two markets are complementary if the product traded in market *A* is more valuable for consumers if used together with the product traded in market *B*, and vice versa. A complementary market for coffee, for example, would be the market for sugar. Likewise, important complementary markets for audio-visual technologies such as TVs would be the markets for DVD players or the game industry which uses systems that must be compatible with the technological requirements of modern TVs.

If the incumbent successfully bundles the products in *A* and *B*, it gains a dominant position in market *B* as well (we are referring to a pure bundling scenario). This makes it more troublesome for a competitor to enter and operate in market *A*. In fact, upon entering *A*, the competitor will face customers who want to consume both the product in *A* and the product in *B* , because the two products are complementary. However, the incumbent which has already gained monopoly power in market *B* through the previous bundling of the two products will remain the main seller of product *B* .

Thus, once operating in market *A*, the competitor would either need to come to terms with the incumbent as far as the provision of product *B* is concerned, or else would need to try entering market *B* as well. In both cases, a larger economic effort from the competitor would be required than if the incumbent had not bundled the products from the beginning. In fact, needing to enter two markets at the same time due to the bundling efforts of the incumbent is certainly more complex and difficult for a new entrant than just focusing on entry into one market alone.

4.3 Dealing with vertical exclusion from the market

What is vertical exclusion?

Two markets are said to be vertically related if two conditions are met: first, at least one of the two related products (which can be goods, services etc.) is sold to final consumers (this is the main difference from horizontal relations); and second, the competitive conditions in one market depend on those in the other market.

Examples of vertically related markets abound. In general, any good or service goes through many different stages of a production process before being presented to final consumers, and each one of these stages may be run by different firms in different markets.

The simplest situation is one in which there are only two firms: a producer of some goods or services, and a retailer, either of the same goods or services, or of a product that uses the first good or service as a necessary input. The two firms are typically called the upstream and downstream firms respectively. For example, a textile firm would be upstream and a clothing company would be downstream. The same is true for a tyre company versus an automotive company, where the first would represent the upstream and the latter the downstream.

The downstream firm buys the product from the upstream firm and sells it to the final consumer. The two firms operate in different markets, that of production and that of final distribution of the product, but the level of production in the upstream market influences the availability of products for

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selling in the downstream market, and the sales in the downstream market influence the revenues of the producer in the upstream market. These facts establish the basic link between the general competitive conditions in the two markets.

Vertical exclusion is the adoption by a firm of business practices not only, or not necessarily, in its main market, but also in markets vertically related to the main market, with the intention of preventing entry into the main market.

Thus, and similarly to the case of horizontal exclusion, in vertical exclusion a firm protects its core business by acting in markets which are different from but related to its core market.

In vertical exclusion, a firm gains control of a so-called bottleneck, which can be represented by goods, services or a facility that is necessary for upstream and/or downstream firms to exert their economic activity. Then—and this is the anti-competitive part—the firm forecloses the vertically related market by denying other competitors access to the bottleneck. Some typical business practices to attain the foreclosure are exclusive dealing contracts and vertical mergers and integrations.

Some examples may be useful to illustrate the main ingredients of a vertical exclusion scenario. As in previous sections of this report, we do not aim here to present a full description of the cases, but instead to elucidate the main aspects of vertical exclusion.

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Example 1: Large infrastructures: Bundling in the energy sector

A typical and relevant example of vertical exclusion is that of large infrastructures. In strategic sectors such as transportation, energy or telecommunications, a diffuse and extremely costly infrastructure is needed to exert economic activity.

The owner of such a large infrastructure, which could be a port, a railtrack system, a grid for the storage and distribution of gas and electricity or a network for telecommunications, may deny totally or partially access to the infrastructure to other providers of the service, thus foreclosing the downstream market of distribution and protecting its dominant position. The owner may also limit access to the bottleneck (the infrastructure) by favouring some firms to the disadvantage of others.

In some cases (see the subsection on the economics of vertical exclusion below) a total vertical integration between production and distribution of the service is the only possibility for the firms operating in the industry.

This foreclosure scenario for infrastructure is particularly relevant in Europe for the strategic sectors mentioned above. In those sectors, furthermore, the infrastructure is generally a natural monopoly; that is, one cannot hope that competitors will build an alternative infrastructure themselves, because it is too costly to do so.

Recognising the problem of vertical exclusion in the energy sector, and the characteristics of a natural monopoly of the energy infrastructure, the European Commission has issued two directives on gas and electricity, adopted in 1990

and 2003 respectively, the second of which includes an explicit recommendation for the unbundling, or vertical separation, of production and distribution of energy: the energy transmission grids should be run independently from the production side.

However, the DG competition report on the energy sector (EC 2007) complained that the industry is still dominated by vertically integrated companies, which control electricity prices in the wholesale market and block new entrants to the market. Today, the unbundling issue in the energy sector is widely debated in Europe, with some Member States in favour, such as the UK, Denmark and the Netherlands, and others strongly against, such as Germany and France.

Example 2: The ice cream market in Germany

In 1991 the Mars group filed a complaint with the European Commission, claiming that two other firms, Langnese-Iglo and Schöller, were reducing its sales by putting into place exclusive agreements with retailers, with the result of linking retailers with the two accused firms. Motta (2004) has a full description of this case.

Under these agreements, the retailers were allowed to sell, in their outlets, only ice cream allegedly obtained from the two accused manufacturers. The exclusivity clauses were often indirect. For example, the manufacturers were supplying freezer cabinets to retailers with the provision that only the manufacturers' products would be stored in those cabinets.

The Commission decided in 1992 that the agreements were in fact an infringement of Article 81, and the two companies were forbidden to use them any longer. The two

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companies appealed to the Court of First Instance, which rejected the appeal in 1995, and the European Court of Justice upheld the decision of the Court of First Instance.

In this scenario, the case-relevant core market for all the firms involved is that of ice cream production, and the relevant vertically related market is that of ice cream retail. The anti-competitive practices, the exclusivity agreements with retailers, were put into place in the retail market to protect revenues in the core market from the competition with Mars. The bottleneck was the product itself, ice cream, and the equipment necessary to sell it, namely, the freezer cabinets.

Suggestions for authorities

As for the case of horizontal exclusion, the main contribution of the economics-based approach to competition policy in helping authorities to deal with Problems 1 and 2 is that it defines the concept of vertical exclusion.

With respect to Problem 1—the problem of evaluating if anti-competitive behaviour occurs and, once recognised, that exclusionary practices may well occur in vertically related markets instead of only in the firm's main market—the suggestion for authorities is clear: all those markets which are vertically related to the firm's main market should be taken into proper account whenever anti-competitive behaviour is under scrutiny.

As a consequence, for a firm operating in different vertically related markets, a defensive argument based on the statement that its behaviour in its core market is pro-competitive is not enough: indeed, the behaviour in relevant vertically related markets should also be fully examined.

Even with respect to vertical exclusion, then, an extension of the focus would be appropriate. Namely, independently of whether a case has been initially opened with respect to the main market or with respect to a vertically related market, the firm's behaviour in vertical markets should always be thoroughly taken into account.

Hence, and similarly to the case of horizontal relations, further elaboration and debate should be called for, in order to find a way to properly extend the current procedures for market identification in antitrust cases (see also the subsection on internal exclusion).

With respect to the problem of evaluating the final effect on consumer welfare of an alleged anti-competitive practice (Problem 2), the economics-based approach of vertical exclusion suggests to authorities that, in general, in order to assess a possible decrease in consumer welfare, not only should the firm's core market be considered, but also the vertically related markets. Anti-competitive behaviour may well have been exerted in a vertical market instead of in the main market.

However, there is a main difference with the case of horizontal market relations. In horizontal relations, all the markets involved are markets where the product is sold directly to the final consumer. In a vertical relation scenario, in contrast, there is by definition only one market where final consumers are present.

Therefore, for vertical relations, the suggestion of taking into account all vertically related markets needs to be specified further. In particular, we know that it is only the welfare of final consumers that matters, but we have also

learned that harm to consumer welfare may well come from exclusion in some upstream markets.

Thus, in the present context, the prescription of taking into account all vertically related markets implies a defined parameter for investigation: if in the final downstream market a sufficiently competitive condition occurs, then there is no need to continue scrutinising any upstream market and the case should be closed.

If, on the other hand, some competitive harm is suspected in the final downstream market, then the authority should investigate further by examining all relevant upstream markets, searching there for any anti-competitive behaviour and eventually amending it.

We remark that considering vertically related markets in the examination of the impact of an exclusionary practice on consumer welfare also means properly recognising the possible efficiency gains of vertical forms of integration.

It is important to recall that vertical restraints and vertical mergers have a number of efficiency-improving features. They are only anti-competitive if the firms involved have significant market power. Furthermore, while efficiency gains from vertical interactions can be strong and clearly detectable, this is not always the case for horizontal forms of integration, for example for horizontal mergers. This is why we have decided to discuss the issue of efficiency gains from practices of vertical interaction in this subsection.

As an example, let us consider again the energy sector. The energy infrastructure needs a huge investment effort to be kept technologically and commercially updated and

efficient. If an authority intervenes to regulate access or property rights to such an infrastructure, its intervention may well have an impact on the profitability of owning the infrastructure itself. This, in turn, has an impact on the incentives of the owner to invest in the infrastructure in order to keep it technologically efficient and up to date. As a natural consequence, the following usually occurs: the smaller the investment, the less the infrastructure is updated, and the more consumer welfare is harmed. Under certain circumstances, it would be better for consumer welfare if only one owner of the infrastructure were allowed, and only a few providers in the final downstream market (see also the economics of vertical exclusion below).

Hence, in the end, the regulatory activity of the authorities has an impact on consumer welfare even through its rulings on the quality of the infrastructure. The authority, then, needs to trade off carefully, in its decisions, the positive effect on welfare which comes from granting a wider access to the infrastructure, with the potential welfare harm which comes from possible disincentives to invest in the maintenance and upgrading of the infrastructure. This trade-off argument generalises well beyond the case of energy infrastructure.[13]

To sum up, by considering markets not in isolation but as components of a vertically integrated system, the competition authorities would be methodologically forced to take into consideration, in a given case, not only potential harm to consumer welfare coming from business practices in upstream and/or downstream markets, but also possible improvements of consumer welfare coming from those practices.

[13] See, for example, OSCE (2008) for a general discussion relating to mergers.

The Economics of vertical exclusion

As in previous subsections, we present here some of the economic theory which identifies and explains vertical exclusion, with no claim to being exhaustive or excessively detailed, but with the aim of exposing some seminal recent academic research that supports our previous discussion.

The economics of vertical exclusion is again well established and has a long tradition. With respect to foreclosure, it is summarised in Rey and Tirole (2003).

An interesting branch of economic literature, which began with Hart and Tirole (1990) and was subsequently developed by O'Brien and Shaffer (1992) and McAfee and Schwartz (1994) among others, explains vertical restraints and vertical mergers as necessary solutions to a commitment problem on the part of the bottleneck owner. This approach applies particularly well to the case of the European energy sector (Example 1 of this subsection).

Suppose in fact that the owner of an infrastructure has sold the access rights to the infrastructure to a downstream provider in exchange for a (usually considerably high) fee. The fee will be renegotiated periodically, say, each year. If the provider's activity is profitable, normal competition in the downstream market will induce new providers, each year at the time of renegotiating the fee, to try to enter the market, and therefore to ask for access to the infrastructure.

At first, the owner of the infrastructure will be happy that more providers are asking to use it, because competition among providers for access pushes the access fee up. However, this is only an initial effect. After a while, if

competition among providers gets stronger, a second effect will materialise: due to the competition itself, the revenues of each provider will decrease, and this implies that each single provider will not be able to continue paying a high fee to access the infrastructure. This second effect is shown, in the end, to dominate the first, and the infrastructure owner will have to reduce the access fee. As a result, its revenues will decrease.

The main insight is that if the infrastructure owner is not able, at a certain point, to commit to limiting access only to a few providers, or in other words to stop competition in the downstream market, it will see its profits from renting out the use of the infrastructure drop dramatically.

We can thus see how it is completely rational for the owner to limit access to only a few providers. This restriction will be implemented by signing, explicitly or implicitly, exclusive long-term access contracts with a restricted group of providers, which is a practice of vertical exclusion. In the extreme and final case, a full vertical integration between the infrastructure owner and one single provider will take place.

In the energy sector, this approach demonstrates that the presence of only a few providers of energy services (perhaps even only one), is the result of a business strategy by the owner of the infrastructure that aims to keep its profits at the monopoly level.

We have already recalled above that vertical restraints and vertical mergers have a number of efficiency-improving features, and that they are anti-competitive only if the firms involved have a significant market power. The economic

literature leading to these conclusions is vast and well established, and there is no possibility here to do it justice.

Efficiency reasons as a support for practices of exclusive contracts are analysed, for example, by Segal and Whinston (2000). In particular, and as anticipated above, the contracts may have a detrimental effect on consumer welfare, by means of deterring market entry, only if the firms involved have a certain degree of market power.

Hart and Tirole (1990) and Rey and Tirole (2003) have shown under what conditions vertical restraints and vertical mergers that mainly impact intra-brand competition can benefit consumer welfare. On the other hand, Rey and Stiglitz (1988; 1995) give conditions under which vertical restraints harm consumer welfare, without however suggesting unambiguous directions for policy interventions in those cases.

We focus here on a more recent work (Nocke and White 2007), which belongs to the stream of studies showing the potential harmfulness of vertical mergers, but which follows a completely different approach. The main contribution of Nocke and White is to show how vertical mergers can facilitate collusion among firms in the upstream market.

As a matter of fact, in recent years antitrust activity has considered vertical integrations to be anti-competitive both in cases where the merger could increase competitors' costs of production, and when the merger would give incentives to the participating firms to commit to higher product prices.

The academic literature supporting this policy attitude has so far taken a strictly static view of the interaction between

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firms. In contrast, in Nocke and White a much more realistic viewpoint is taken; namely, that the interaction between upstream and downstream firms occurs over time, hence in a dynamic setting.

In this framework, the authors show that vertical mergers can facilitate upstream collusion due to an outlet effect: unintegrated upstream firms cannot profitably sell through the downstream outlets owned by their integrated upstream rivals when they choose not to collude; this effect reduces the profitability of non-collusion strategies, and hence facilitates collusion.

These results suggest that antitrust authorities should take into account the collusive effects of vertical mergers as well. A further discussion of the effect of mergers on collusion, addressed mainly to policymakers, can be found in Ivaldi et al. (2003).

5 Political support for competition policy

Many countries in the EU have traditions of having important industries dominated by a handful of firms whose positions are sheltered by powerful legal and political forces. One of the most effective strategies that incumbent firms in the EU use to protect themselves from competition is to persuade their governments to impose restrictions that will keep out competitors.

Consider, for example, a hypothetical manufacturer that is dominant in its domestic market and is well connected in the capital, but fears that it will begin to lose sales to more efficient and innovative competitors that are beginning to appear. Of course, the enterprise could reduce its prices, but this will eat into its monopoly profits. It might also try to improve its product quality, but this is usually expensive and lacks any guarantee of success. It might also try to collude with its competitors to prevent market entry, or to use its market power unilaterally to exclude competitors, by acquiring control of a critical input, using exclusive dealing to block a vital channel of distribution or engaging in predatory pricing.

Schemes like this, however, carry a risk of detection, as well as a high risk of failure. Instead, our hypothetical firm may well conclude that a better plan would be to use its influence to persuade the government to do the job of shielding its market position. There are many ways a government can accomplish this, from establishing an unreasonably exclusive licensing scheme, to imposing environmental, labour or other costs that are not faced by the incumbent, or imposing restrictive distribution conditions disguised as consumer protection measures. Such governmental restrictions are all the more likely to be successful when they can be disguised as believable justifications.

Any effective competition authority will at some point have to take on anti-competitive practices that benefit firms which are in a position to lobby governments and political institutions to their own advantage, even when their interests are against free competition, as in our example.

In such cases, the effectiveness of competition policy may well depend on whether the competition authority can muster the political support to impose and enforce remedies that place the interests of consumers ahead of those who use their dominance to protect their market power. In turn, whether the authority will be successful in promoting and protecting competitive markets will depend heavily on whether politicians' constituents recognise and advocate the value of competition.

Politicians' constituents are likely to support free competition only if they embrace the idea that their lives will be better off in free markets where competition really rewards those who produce the things they want at prices they are willing to pay. For many of those constituents, this may be counterintuitive and may require a leap of faith that they are not willing to take. Thus, the idea does not always garner the support it deserves.

Hence, the competition authority will need a strategy of competition advocacy, aimed at making the costs of firms' and governments' anti-competitive practices transparent to citizens.

Having the economics-based approach as a general framework for the application of competition policy may help greatly in the building of such competition advocacy.

Indeed, every anti-competitive practice and every anti-competitive government regulation imposes costs on consumers, sometimes reasonably and sometimes not. Licensing restricts entry and reduces competition, and in some cases creates opportunities for corruption. Product or service standards usually impose compliance costs that will

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be passed on to consumers. These costs operate like hidden taxes, even though they are not usually recognised as such by consumers and politicians; typically they are simply accepted as part of the status quo or considered acceptable in light of the proffered justifications for the practice.

A competition authority which operates on the basis of a clear and definitive consumer welfare standard, hence within an economics-based approach, and which has proved over time that its decisions are at least in principle aimed at preserving and improving the welfare of consumers, can bring powerful tools to bear on the problem by using its economic expertise to identify publicly the practice's costs and countervailing benefits.

Armed with this knowledge, politicians, consumers and voters can then make informed choices about policy and purchases.

Regardless of whether a competition authority chooses to initiate a law enforcement action where it is feasible, or to concentrate on competition advocacy where it is not, that authority will be taking substantial steps towards building public support for competition policy whenever it is adamant that everything it does is to the final benefit of consumers, thereby helping to convert competition's promise of enhanced consumer welfare into a reality.

Having consumer welfare as the unique operational criterion, as would be statutorily so with the economics-based approach, will substantially help the competition authority to build, over time, a strong reputation as a defender of consumers' interests and not of the interests of

competitors, and hence will greatly help the authority exert that competition advocacy function which is necessary to implement its pro-competitive activity.

6 Recommendations

In this study, we have presented and extensively analysed an economics-based approach to competition policy. This approach represents a consistent and general framework for EU policymakers to design future competition policy and to reform existing policies in Europe.

6.1 Why adopt the economics-based approach to competition policy?

- European policymakers should pursue and promote the economics-based approach to competition policy. This approach defines consumer welfare as the unique operational standard on which competition policy is based, meaning that a business practice implemented by a corporation should be considered as anti-competitive and banned if and only if it harms consumer welfare.

- In the current checklist approach followed by the EU, in contrast, a business practice is banned if it falls within a pre-established list of conducts that can be considered as anti-competitive. As a result, in the current approach a practice is judged more on the basis of the commercial and legal form that it takes than on the basis of its economic

consequences. This reduces competition policy to case law analysis and makes it mostly ineffective.

- The economics-based approach implies by definition the use of sound economic analysis in competition cases, since economic theory provides the right tools to evaluate the impact of business conduct on consumer welfare.

- With consumer welfare as the unique operational criterion, the economics-based approach puts the protection of consumers definitively at centre stage, preventing competition policy from protecting competitors instead of competition and welfare.

- In the economics-based approach, business practices that differ—even greatly—in their commercial and legal features will receive the same treatment whenever they have a similar effect on consumer welfare. Hence competition policy will be more predictable, creating a more stable framework for firms' business activities.

- The economics-based approach to competition policy sustains economic efficiency. Indeed, in the checklist approach, it is typical that firms whose practices have been sanctioned on competitive grounds adopt marginal commercial modifications of their practices in order to escape the ban and continue causing the same competitive damage. This would not be possible with the economics-based approach in place, since in that case it is not the legal and commercial form of the business practice which matters, but its economic consequence.

- The economics-based approach to competition policy fosters economic efficiency and growth to the benefit of citi-

zens. Indeed, with a consumer welfare standard as the only relevant operational criterion for banning business practices, firms will be free to choose the most profitable and efficient business strategies under the sole constraint that they do not harm the welfare of consumers. Hence the promotion of efficiency and growth by firms will be directly to the benefit of citizens.

- The economics-based approach to competition policy helps keep the lobbying processes in balance. Indeed, large companies are generally better acquainted with competition cases than consumers, and hence competition decisions may tend in some cases to be influenced—through the normal lobbying process—more by corporations than by consumer organisations. Once consumer welfare has been set as the main criterion for the exercise of competition policy, it will be a statutory responsibility of competition authorities to take the interest of consumers into account.

- The economics-based approach naturally leads to a rule of reason procedure for competition policy, while at the same time strongly discouraging the adoption of per se rules. In addition, the suggestion for the burden of proof in competition cases is clearly laid out.

- The economics-based approach supports the view that free competition in the market is the best social mechanism to promote general well-being, and takes a further step towards identifying a consumer welfare criterion to concretely shape this view and translate it into a usable guide for policymakers and authorities. This approach does not call for a more dirigiste competition policy, it calls for a more efficient competition policy.

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6.2 How to implement the economics-based approach to competition policy

We summarise here suggestions that policymakers should give to competition authorities in order to allow them to implement competition policy consistently with the economics-based approach.

The economics-based approach provides insightful suggestions for dealing with some of the more troublesome and difficult-to-detect anti-competitive practices: so-called exclusionary practices.

We recall from Section 4 that exclusionary practices are those business practices put in place by a firm with the intention of keeping potential competitors out of that firm's market, or with the intention of forcing them out of their own market after they have entered it.

We consider three broad scenarios: (a) internal exclusion, or exclusion of competitors from a firm's main market; (b) horizontal exclusion, where a firm tries to damage competitors which are active in a market different from but related to the firm's main market; and (c) vertical exclusion, where exclusion practices take place at different stages of the production process.

Of course, a competition authority is not expected to know in advance what kind of exclusionary practice is occurring. In the absence of this knowledge, the authority should take into consideration all the suggestions that we list below:

- Economic theory suggests that internal exclusion is a two-phase process with respect to its effect on consumer welfare. In a first phase, the incumbent firm reduces prices

below production costs to force competitors out of the market. In this phase consumer welfare increases. In the second phase, once the incumbent regains its market power, it increases prices to recoup the losses incurred in the first phase and to restore semi-monopolistic conditions. There is a high probability that the total effect on welfare will be negative. Hence the economics-based approach suggests that, in order to preserve consumer welfare, a competition authority should establish a prolonged and continuous monitoring of markets, to see whether and when a recoup phase indeed begins. This implies that the competition authority should behave like a regulatory authority. As a result, the distinction between competition policy and regulation policy should be overcome, and perhaps a unique authority should pursue both policies. This is not the case, currently, in the EU.

- In the case of horizontal exclusion, consumers may be damaged not in the firm's main market, but in markets related to it. Hence, in order to defend consumer welfare, we have here a strong prescription for competition authorities: the authority should not only investigate whether the actions of the firm lead to exclusion in the market relative to which the competition case has been initially raised, but also whether the firm's actions lead to exclusion in relevant adjacent markets. A competition authority should have full power to carry out this extended task, and whenever the current legal standards impede it, the law should be reformed appropriately.

- In the case of vertical exclusion, the anti-competitive behaviour may occur not in the firm's main market, but in markets vertically integrated with it according to the firm's production process. Hence, as in the case of horizontal exclusion, even with vertical exclusion an extension of the focus would be appropriate. Namely, independently of whe-

ther a case has been initially opened with respect to the main market or with respect to a vertically related market, the firm's behaviour in vertical markets should always be thoroughly taken into account. However, there is an important difference from the case of horizontal exclusion. In a vertical relation scenario, there is by definition only one market where final consumers are present, and it is only the welfare of final consumers that matters. Thus, a well-defined direction for investigation emerges: if in the final downstream market sufficiently competitive conditions occur, then there is no need to continue scrutinising any upstream market and the competition case should be cleared.

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