Funding the budget of a competition authority with the fines it imposes

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Abstract

Most competition authorities in the world (in Europe, in particular) impose a suboptimal level of fines. In this paper two attempting explanations are proposed, based on accountability strategies and career concerns of governing bodies of these agencies. In order to compensate the distortion in their incentives, a proposal of funding the budget of competition authorities is advocated: these authorities could be partially financed by the fines they impose for anticompetitive behaviour. Surprisingly enough only very few antitrust authorities (Bulgaria, Portugal, Peru) are allowed to finance their own budget in this way. The implications of this proposal are addressed, paying attention also to the practical aspects of its implementation.

This version: 6 March 2008

¹ Italian Competition Authority. The views expressed in the paper are those of the author and do not involve the responsibility of the Italian Competition Authority

Introduction

Is there any justification for the fact that only very few antitrust authorities are allowed to use fines, exacted for anticompetitive behaviour, as a source of financing their own budget? As far as we know, only the competition authorities of Portugal, Bulgaria and Peru can do this². The Hungarian competition authority is allowed to use (indirectly) 5 % of its fines for funding conferences and external research projects. But in no case can it use this money for covering ordinary expenses (e.g. salaries). The Hungarian example materializes what is probably the main concern for using this sort of financing: the risk of distorting incentives which is, allegedly, triggered by the use of fines for rewarding the same people who impose them.

To anticipate the main conclusion of this paper, we do not only consider this concern unjustified but we also argue that this sort of financing could align the present incentives of a competition authority to the purpose of maximizing the impact of its action. This is due to the fact that, for a number of reasons, most competition authorities in the world (in Europe, in particular) impose a suboptimal level of fines. This fact was noted long ago and it has recently come under spotlight, with reference to fines fixed for cartel cases (Connor, 2006). The explanation of this phenomenon supplied in the paper is very preliminary and not completely satisfactory. But the fact remains that fines are currently low and that the proposed mechanism for funding competition authorities can correct this distortion.

The paper is mainly focused on the appropriate incentive structure which a competition authority should have in order to act in the interest of the public. Unfortunately this topic, despite its obvious relevance, is at present neglected. Not many resources have been devoted to the study of the appropriate incentive structure for regulators or to provide a realistic representation of public enforcer genuine motivations. At the end of their survey on the theory of public enforcement of law (2000), Polinsky and Shavell mentioned some lines of research which deserved more attention: the behaviour and compensation of enforcement agents were on the top of the list. We haven't proceeded too much since, in 1975, Landes and Posner considered the lack of a theory of the actual behaviour of public institutions the main obstacle for not being able to choose between private or public enforcement. We can however be inspired from a couple of different lines of research regarding: a) private law enforcement; b) public choice literature.

Contributions on private law enforcement provide some insights on the effect of an incentive structure on enforcer behaviour. This literature originated from the seminal paper by Becker-Stigler (1974) which advocated the recourse to private law

² Portugal and Bulgaria can use (for funding their budget) up to respectively 40 and 25 % of fines.

enforcement (basically in order to get rid of bribes). This opinion was almost immediately challenged by Landes-Posner (1975) who argued that private enforcement would generate an excess of enforcement. Subsequent contributions (Polinsky,1980, Garoupa,1997) investigated the impact of specific settings (different cost structures or different types of error). However this literature only deals with homogeneous damages. On the contrary, we observe different types of anticompetitive conducts, each generating its own specific damage and each having its own probability to occur. The analysis is inevitably flowed as it does not pay attention to the way private and public enforcers select cases to be investigated. Furthermore, this literature, with an important exception (Garoupa, 2002), focuses only on the impact of incentive mechanism on private enforcement. It does not study the impact of incentive schemes on public enforcement. So we must look in different directions to have some insights on the real behaviour of public law enforcers.

Taking into consideration public choice contributions seems the natural way to do this. Unfortunately, as far as antitrust intervention is concerned, this literature is still in its infancy. It has paid specific attention to the relationship between the antitrust agency and political pressure. Several works, in particular, have examined the influence of American Congress over the FTC (De Alessi, 1995;Coate-Higgins-MdcChesney, 1995; Weingast-Moran,1983). Also the internal decision process of FTC has been investigated, showing the interaction of economics and law departments (Katzmann,1980).

But this literature seems less prolific in providing a genuine motivation for the behaviour of governing bodies of antitrust agencies. This is not completely surprising, as the public choice approach tend to address the influence of lobbies on regulatory institutions. In a way their behaviour is conceived as been directed by outside. Therefore there is not much room to look at the endogenous motivation of the conduct of their governing body.

The plan of this paper is as follows. The next paragraph will set out all the ingredients for the subsequent analysis and defines the optimal antitrust policy. The second paragraph deals with what can be considered common behaviour of competition authorities. It is argued that this conduct, being inspired by some bureaucratic rules, diverges from the optimal one. In the third paragraph a mechanism for financing a competition authority (with the fines it imposes) is advocated with the motivation that it is able to correct the bureaucratic distortion of incentives.

One important warning: this paper refers to a European continental antitrust institutional framework based on a competition authority empowered with both investigative and decisional powers. This authority can condemn and fine firms, although it is subject to the scrutiny of appeal courts (Court of First Instance and Court of Justice, in case of the European Commission). The proposal advanced in this

paper needs obvious adaptations in the case of an Anglo-Saxon institutional context, American in particular, where the power to inflict fines is only in the hands of a court. However the US private enforcement of antitrust law already produces some of the beneficial results which in Europe could be obtained through the funding approach advocated in this paper.

<u>1 - The antitrust intervention</u>

There are several types of anti-competitive conducts, each characterized by a probability to occur and by a specific impact on welfare. Total welfare loss for a society as a whole is the summation of the harm of each type of anti-competitive conduct weighted by the number of its occurrences. Apart from merger control, which is not considered here, antitrust policy is aimed at reducing the social damage associated to anticompetitive conduct. This policy has a direct as well as an indirect effect. The direct effect is the one which is strictly associated to the single case being investigated. The indirect effect, which is generally considered as being greater, depends on the deterrence produced by fines imposed on anticompetitive conduct.

In enforcing its policy, a Competition Authority (CA) enjoys some degree of discretion which is mainly restricted to two types of decisions: a) the choice of cases to investigate; b) the choice of the average fine exacted for anticompetitive behaviour.

Because of scarce resources, exogenously fixed by the Government, a CA must establish some criteria for selecting the cases to investigate, out of a bunch of possible cases submitted by allegedly affected firms or consumers. This choice involves a multiple decision process based on *a priori* judgment on the relevance, for competition policy, of sectors, type of anticompetitive conduct, dimension and notoriety of firms.

The second relevant pillar of competition policy concerns the choice of the average fine, that is the average severity applied to condemned conducts. One CA might decide for a very high level of fines whereas another can show a much milder approach. But, once an average level is chosen, a CA does not (or should not) have any discretion in fixing the fine for a single case: that is, the relative proportion of fines, from one case to another of the same type, should not be a matter of discretionary policy. If one conduct causes a twofold social damage with respect to another one, it must be fined twice as much (assuming the same probability of being caught and condemned). The reason is that a CA should follow a non discriminatory approach in fixing fines (for each single case) because its reputation is strongly associated to the fairness of decision process and because appeal courts pay much attention to uniform application of competition policy. A clear evidence of the consistency requirement in fixing fines can be found in the effect based approach for

their quantification followed by several national competition authorities (e.g. France, Holland, Spain).

We argue that when a governing body is appointed it fixes the criteria for the allocation of resources among different types of anticompetitive conducts and the average degree of severity and it maintains this policy almost unchanged during all period it leads the CA. Before proceeding, we must enlighten two basic relationships regarding fines, on the one side, and deterrence and probability of convicting firms, on the other.

Fines and deterrence

The main impact of fines is that on deterrence. By fining a firm, a CA signals that is ready to fine other firms in the same way if they are found committing the same violation. Only a subset of conducts, belonging to the type which has been investigated and successfully fined, ceases as a consequence of the deterrent effect of the fine. This is because there are firms whose unlawful conduct generates a gain which is higher than the expected fine (therefore they are not deterred).

The standard literature considers that deterrence is due to the simple declaration of the policy regarding fines. We rather think that deterrence is triggered by the implementation of this policy. This seems coherent with the normal functioning of competition policy, as this policy emerges from specific decisions. The deterrent effect of a fine mainly affects the type of anticompetitive behaviour which has been investigated and fined. We also argue that the deterrence effect expires if no cases of the same type have been investigated by a lately appointed governing body of a CA, as the public realizes the change in the policy.³

Fines and probability of catching and convicting a firm

Because of the impact of fines on deterrence, we expect that fines modify the number of anticompetitive actions adopted by firms and, because of this, also the probability of catching a firm which behaves this way, given the amount of resources employed by a CA. Notice that fines also influence the probability of being convicted. The probability that the CA decision is backed by appeal courts (Π_i) is affected by the incentives to appeal of condemned firms. These incentives are clearly connected to the level of fines, as high fines increase the probability for firms to appeal and vice versa. Therefore fines influence deterrence and the number of occurrences of anticompetitive behaviour in two different ways. On one side the higher the fine the lower the incentive to appeal and the lower the probability of being the fine the higher the incentive to appeal and the lower the probability of being the higher the fine the higher the incentive to appeal and the lower the probability of being convicted. That is to say that a high degree of severity, although it might

³ For the sake of simplicity in the rest of the paper we assume that the deterrence effect lasts only one year.

represent an optimal policy, could imply a lower degree of direct intervention (because the number of anticompetitive conducts shrinks) and exposes the CA to the risk of failure before appeal courts.

Optimal antitrust intervention

The optimal antitrust intervention is the one which minimizes the social damage due to anticompetitive behaviour. According to the prescriptions of the optimal fine formula the fine should be fixed in this way: fine equal to the damage, divided by the probability of conviction.

When the decision of appeal court is not taken into consideration, the optimal fine for a specific type (*i*) of antitrust infringement is defined as s_i^* . It is equal to the damage (D_i) divided by the probability of conviction. A plausible measure of this last probability is given by the ratio of number (n_i) of investigations completed in a year⁴ to the total number (N_i) of infringements of this type. This ratio can be considered a proxy for the probability to convict an anticompetitive conduct of the same type the following year. We define the average severity chosen by a CA as δ , with $0 \le \delta \le 1$. It follows that the real fine fixed by a CA is equal to $\delta \frac{N_i D_i}{n_i}$.

Cases to be investigated must be selected in a way which maximizes the (direct and indirect) impact of the antitrust intervention. This optimization is constrained by available resources given to a CA, which represent the extent to which the society wants to enforce the competition policy. Notice that the selection of cases should be mainly driven by D_iN_i , that is the total damage caused by anticompetitive conducts. With different types of antitrust infringements, the optimal fine policy needs some preliminary assessment of the occurrence of them, in order to allocate resources and to quantify the fine. The CA, when fixing a fine, must also keep into consideration the possibility that its decision is not backed by appeal courts. Therefore the optimal degree of severity could be less than 1⁵.

In particular, we assume that the impact of antitrust enforcement can be split in two components: the direct impact of cases ($\Sigma n_i = R$) completed during a year and their indirect impact due to deterrence. For simplicity we assume that the deterrence effect only lasts one period and depends on the outcome ($\delta, n_i/N_i$) of the former year. We also assume that appeal courts examine antitrust cases during the same year in which the CA reached the decision.

⁴ With the word "year" we mean a time span, which is long enough for assessing the probability of conviction.

⁵ We assume, somehow pretentiously, that CAs are always right and that appeal courts can be wrong.

In conclusion, the optimal antitrust intervention is the outcome of the following maximization:

$$\max_{n1...n2} \sum_{\delta}^{z} \prod_{i=1}^{z} \pi_{i}[\delta] (D_{i} (n_{i} + \gamma_{i} [\delta, n_{i} / N_{i}](N_{i} - n_{i}))) =$$

$$\max_{n1\dots n2} \sum_{\delta}^{z} \sum_{i=1}^{z} \pi_{i}[\delta] D_{i} (n_{i}(1-\gamma_{i}) + \gamma_{i}N_{i})$$

s.t.
$$\sum_{1}^{z} n_i = R$$

where: z = number of types of antitrust infringements

 γ_i = deterrence coefficient

R = number of cases which can be completed by a CA in a year⁶

 n_i = cases concluded in the year concerning infringements of type i

N_i =number of infringements of type i

 δ = degree of severity (measured in percent of the optimal fine)

D_i= damage caused by an anticompetitive conduct of type i

 Π_i = probability that the decision regarding an infringements of type i is confirmed by appeal courts.

2 - Real antitrust enforcement: suboptimal level of fines

We don't expect that a CA generally follows the former optimal rule. The president and commissioners of a CA behave according to an incentive structure which depends on the institutional setting established in their own country. For this reason it is difficult to draw a common picture regarding a bureaucratic model of antitrust enforcement which fits into all institutional contexts. Garoupa (2002) presented a model of real behaviour of a public enforcer and explored the consequences of it regarding the level of enforcement. His article was based on some works by public choice scholars (Gradstein, 1993) which emphasize the rent-seeking motivation of a governmental institution. This institution, according to the Garoupa model, is rewarded with fines and, because of this, shows – for certain categories of harm - an higher level of enforcement with respect to an optimal (welfare maximizing) enforcer. This model does not fit into the institutional settings of almost all antitrust authorities in the world, as they are not allowed to be rewarded with fines.

In this paragraph we will supply some preliminary intuition on the real approach to fines followed by an antitrust agency and on its motivations. Before proceeding this way we provide some information on the real policy implemented by antitrust authorities.

⁶ We assume that this number is exogenously fixed.

Facts

Connor has brought the attention to lamentably low fines imposed by competition authorities for cartel cases (Connor, 2006). He supplied a measure of the severity of sanctions relative to the degree of injury, as calculated by the "average monopoly overcharged achieved by a cartel during the entire conspiracy period". The referred to all countries is 39.8 % and the one referred to the Europe figure Community is 31.7 %. The percentage referred to Europe is even more striking as we consider that in Europe the private enforcement of antitrust law is still at its infancy. Notice that the fight against collusion is a consolidated goal of antitrust intervention, shared unconditionally by almost all CA in the world. Therefore a suboptimal policy for fining cartels should imply an even more lenient fine policy regarding other, more controversial, types of antitrust intervention, such as abuse of dominance (monopolization) cases.

Concordant conclusions are those supplied in several OECD reports. For example in the executive summary of a roundtable on "Cartel sanctions against individuals" is written:

"There is ample empirical evidence that corporate sanctions in the form of fines are almost never sufficiently high to be an optimal deterrent, and in the most cases are substantially below that level" (OECD,2003)

It must be noticed, however, that in 2006 the European Commission changed its approach (by publishing new guidelines on the quantification of fines) and started inflicting very high sanctions to firms involved in hard core cartels. In a recent article Motta stressed this change of regime and presented a simulation according which the present level of fines, quantified following the new guidelines, seems to be approaching the optimal fine model, which allows to achieve an optimal deterrence (Motta, 2008).

Therefore, from the empirical literature we can conclude that competition authorities generally impose a suboptimal amount of fines although, in the case of the European Commission, a harsher approach is now followed. Can we provide a justification for these facts? We submit two possible explanations based on accountability strategies and career concerns of governing bodies of CAs.

First possible explanation: accountability strategies

A CA is generally accountable with respect to the public opinion. For this reason it wants to show a certain degree of activism and an high success rate before appeal courts. Showing activism and competence seems a rather obvious way for a CA to justify its role.

In institutional settings where the assessment of the policy impact by an external agency is virtually absent, the public judgement on the activity of a governing body of a CA is strongly conditioned by the press coverage of its decisions⁷. In a way this coverage can be considered a proxy for the good functioning and the dynamism of the authority. But it is certainly a distorted indicator of the appropriateness of the policy insofar as the press coverage of cases involving important firms is much wider than for other cases, independently of the antitrust relevance of the case and its long lasting consequences.

Also the degree of acceptance of its own decisions represents an imperfect indicator of the success of the enforcement, as it depends on the nature of the case (standard or innovative) or on the nature of the decision (a lenient decision is not appealed). Therefore there is a clear incentive for favouring investigations of cases which do not present difficulties from the legal point of view and for which collecting evidence is simple. This is the well known propensity for a conservative policy by bureaucratic bodies, which basically depends on weak incentives for succeeding in difficult tasks.

The same motivation can force a CA to be lenient in its fining policy. The lower are the fines, the higher the probability to catch an anticompetitive conduct, the lower the probability of an appeal procedure or, in case of appeal, the higher the probability of prevailing, as firms do not have incentives to pay high fees to law firms when fines are low. For the same reason we expect that a bureaucratic body will consider, more often than it is really necessary, the possibility of closing a case with undertakings instead of with a formal decision. In this way the single case is solved successfully and at no risk of being reversed by an appeal court. It should also be considered that, by choosing quantitatively relevant cases (that is, cases involving firms with large turnover), the CA is able impose fines which are high in absolute values but low in percentage. In this way the two, partially contradictory, motivations (visibility and acceptance) of the governing body of a CA can be reconciled.

The proposed explanation can account for the recent fine policy followed by the European Commission. It is undisputed that in the last period leniency programs were a great success for the Commission, bringing a long cue of cases involving large firms. Because the evidence provided by leniency applicants is generally rather solid, the probability that the Commission wins the case before appeal courts is very high. In short, thanks to leniency programs the European Commission enjoyed wide visibility (many cases involving large firms) and low risk to show poor competence in the appeal process. Therefore it was in the right position to increase the degree of deterrence, at no risk of adversary effects on reputation.

⁷ De Alessi (1995) and Coate-Higgins-McChesney (1995) addressed the same problem when looking at the FTC.

Second possible explanation: career concerns

Quite naturally, the president and commissioners of an antitrust agency behave with their career perspectives in mind. Unless they do not retire, we can envisage for them two possible jobs when the appointment at the CA expires: a) in a consultancy firm or/and an academic position ; b) a politically appointed position.

In the first case, members of the governing body of a CA have almost the same incentive structure of the staff. They work at a CA hoping to join some consultancy firm (in antitrust law or economics) at a later stage. For this reason they are strongly motivated to add a high technical profile to their activity and to show a strong preference for opening many investigations in which their skills can be proven. There is also a clear incentive to increase the severity of a fine policy: in this way the demand for consultancy services increases so as to broaden their future job market.

The matter appears rather different in the second case. Here technical skills seem less crucial, as the future position will involve a completely different activity in some other governmental branch. Probably the main skill which is requested to people having in mind this career perspective is an high capability in problem solving and in mediating among contrasting interest groups. Their focus is inevitably set on the single case under investigation and the implications for deterrence appear blurry. We do not expect an high fine policy in this case, as the emphasis is set on the regulatory side of antitrust intervention. In a way the fine itself is considered a failure, as it reveals a lack of "influence" on the business community.

We do not have enough information on which of these two models prevails in Europe. Casual observation shows that the first model is generally adopted in UK, Ireland and some Nordic European countries as the other prevails in the rest of continental Europe. Therefore we expect that in large part of Europe, career concerns limit the amount of fines fixed in antitrust cases.

As to the European Commission, we observe that the decision process seems to rest mainly on the hands of the Commissioner and the senior managers of the DG Com. and, in the last period, also on those of the chief economist. That is to say that the reference model should be closer to the first one we mentioned. This is particularly true in the last period when, with Monti and Kroes, non genuine political commissioners, have been appointed. It is probably also because of this that the recent fine policy of the Commission has been harsher.

In conclusion, the intervention of an antitrust authority seems to be affected by *myopia*: it is a fact that it does not consider the impact of its decision on deterrence as it should. Why does it behave like this? Because consumers, and more generally public opinion, do. Only consumers affected by the anticompetitive conduct under scrutiny are concerned with the result of the case. Quite understandably they are in favour of a positive solution of the case. Because of this the competition authority, in

particular the one which is ruled having future political appointments in mind, may be affected by myopia and takes care only of the impact of its decision on the welfare of consumers involved in the case. Fines result inevitably fixed at low levels.

Notice that the problem is only mitigated but not solved if a external office in charge of impact assessment of the competition policy is established. Generally these offices pay attention to results of single cases and not to deterrence. However these offices must evaluate the impact of the public action and, indirectly the effect of anticompetitive behaviour. By spreading a culture of results, these offices can indirectly contribute to a better understanding of the functioning of a CA, including the way in which it quantifies fines.

If the CA follows the described "myopic" approach, that is if it does not consider the deterrence impact of its action, and if it shows a preference for dealing with quantitative relevant cases (the ones involving well known firms), we expect that fines are fixed in a suboptimal way, with more weight attached to the direct impact of the enforcement. In extreme situations, we expect that a CA does not care of deterrence at all. Because of this it does not impose any sanctions and selects cases according to the following maximization,

$$\max_{n1...n2} \sum_{i=1}^{z} \pi_{i} [\delta = 0] D_{i} n_{i}$$

s.t . $\sum_{i=1}^{z} n_{i} = R$

Notice that in this case the CA selects investigations according to $D_i n_i$, instead of $D_i N_i$ (the optimal rule). This is because a CA pays more attention to cases which involve large firms.

3 – Funding a competition authority with fines

We haven't examined yet the way in which a CA covers its budget. Up to now the implicit assumption has been that it is financed with a constant yearly payment from the taxpayer. This source of finance doesn't generate any particular incentive for the antitrust public enforcer, although it may jeopardize its independence, as the agency must rely on the money provided by the government or by the parliament.

Fees to be paid on notified mergers are also a common source of finance among antitrust agencies. This type of financing shows some problems too. It is unpredictable, increases transaction costs of mergers and could distort incentives. Sometimes, as happens in Italy, these fees must be related to the effective costs incurred in the merger control by the CA. If the authority is in shortage of funds, it has a clear incentive to show an high degree of severity regarding mergers so as to increase the number of investigations (phase two of merger control). In this way more resources are employed in merger control and an increase in fees could be justified. Criteria for selecting cases are therefore distorted. In short, the most common sources of financing CAs are not exempt from criticism.

The proposal

We now consider a different way of funding a CA, which is related to its performance. In particular, we explore the possibility of funding the CA with a share of the fines it imposes. The CA should be entitled to retain a portion of fines which has been confirmed (either because the decision was not appealed or, otherwise, because the decision has been backed by appeal courts). The finance provided by fines should be additional and not in substitution of the governmental funding and it would be only used for some specific purposes. In particular, what we imagine is a fund fed by confirmed (by appeal courts) fines from which a CA can draw some money up to a predetermined limit per year.

What should the CA do with the money taken from fines? We can envisage three different ways of using these funds. First, they can be used for providing incentives for the staff. These incentives will be linked to successfully fined cases (e.g. when the fine has been confirmed by appeal courts). Second, they could finance a limited expansion of the workforce at the CA. Quite naturally, people employed with this funds can have only temporary positions. Among these positions, it would be that of the Chief Economist. Finally, these funds can be used to finance conferences and studies on competition policy.

In order to evaluate this proposal we must look at the incentives which arise with this particular funding.

The main effect is the one we are looking for: this sort of funding should have a countervailing impact on the distorted motivation of a typical governing body of a CA. The allowance for retaining part of the fines should make the CA more willing to show the appropriate degree of severity. Thanks to higher fines, the CA could attract more and better personnel and be more active in sponsoring competition policy. As a consequence the president and commissioners should enjoy more visibility, which would help future working perspectives. Also the staff would be more motivated, as this funding mechanism would allow successful investigators to be more rewarded. Therefore this proposal would reinforce the motivation of the staff for the quality of investigations.

The use of funds for studies and conferences is also a way to improve the quality of decisions as well as the image (and personal contacts) of people working at the CA. For this reason the possibility to use part of fines for this purpose is at the same time a good incentive for adopting an optimal approach to fines and also an opportunity for a better decision process. Suffice to mention the impressive performance of the young Hungarian Competition Authority which has a provision like this.

As to the decision regarding the average level of fines, we have to ascertain whether this funding mechanism triggers an excess of severity, that is whether it represents an overshooting with respect to the problem we want to solve. The limits imposed in the utilization of these additional funds are precisely aimed to reduce this risk. With this particular funding a CA looks like a private enforcer still maintaining, however, its public nature. The key distinction can be traced back to the use of resources. A private enforcer is free to employ as many resources as he likes. In our proposal there is a limit (established by law) for an increase in resources. It is not an innocent and negligible distinction. Landes-Posner model prescribes a suboptimal (that is, excessive) private law enforcement because there is a tendency to employ more resources than an optimal enforcement will do^8 . On the contrary, if resources can increase only to a limited extent, as in our proposal, the over enforcement effect should not materialize in practice. On the other side, giving the opportunity to use the extra-funding for hiring some more personnel, although for temporary positions, is the price we must pay in order to make this proposal palatable to the natural attitude of governing bodies for expanding the scale of operations.

If we assume, as we did before, that resources are exogenously fixed, the antitrust policy is chosen according to the following maximization,

$$\max_{n1\dots n2} \sum_{\delta}^{z} \pi_{i}[\delta] n_{i} \delta s_{i}^{*} =$$
$$\max_{\delta} \sum_{i=1}^{z} \pi_{i}[\delta] \delta D_{i} N_{i}$$
s.t. $\sum_{i=1}^{z} n_{i} = R$

We can easily see that this policy looks like the optimal one. There is a clear incentive to fix fines different from 0 and the selection of cases rests not only on their relevance but also on their frequency (N_i) . Notice that the number (n_i) of investigations on each type of anticompetitive conducts is no longer an argument of this minimization. Therefore a CA should follow the simple rule of completing only one investigation for each of those conducts which show the highest degree of (weighted) relevance.

⁸ This effect is substantial when there are many competing private enforcers. But it is still present even if private enforcement is provided by a monopolist.

3 - Some possible objections to this proposal

Misbehaviour

From preliminary discussions on this proposal a recurrent objection has been raised. Once the CA is financed with its own fines the temptation is high for it to misjudge cases in order to collect money. That is, for example, what sometimes emerged when policemen were allowed to retain part of the fines they charged to drivers. This analogy is misleading. In the case of police, fines are generally of modest amount and almost always passively accepted by drivers. On the contrary, in the case of antitrust, sanctions are not negligible and, because of this, are almost always appealed. The scrutiny of appeal court prevents the CA from misbehaving.

Distortion in selection of cases

Objections based on possible distortions in case selection seem more reasonable. We have not detected any distortion in case selection if fines are fixed in the optimal way (damage/probability of conviction). However, it may happen that a CA does not know the frequency of anticompetitive conducts. In this (not implausible) case it cannot calculate the optimal fine and it is forced to resort to the simpler rule of fine quantification which is only based on the value of damage. In these circumstances a clear distortion emerges for taking into consideration only cases which show the highest damages, even if they are relatively rare.

In order to partially correct the potential distortion of the proposed funding mechanism, the CA could be allowed to retain only a maximum predefined amount of fines from any single case. In this way the incentive to concentrate the action in cases where large firms are involved is lessened.

Distortion in the selection of activities

An antitrust authority is generally involved in several activities, some of which do not generate fines at all. It is the case of merger control, sector analyses and advocacy. Should the CA be allowed to retain part of its fines, the risk could be high that it reduces these other not "lucrative" activities. But a closer look at these activities reveals that this risk is not high at all.

In the case of mergers, instead of distorting the optimal selection of activities, our proposal produce in fact the opposite result. This proposal compensate the already mentioned distortion due to the fact that a CA is generally rewarded with fees for notified mergers, and consequently there is an incentive to departure from the optimal rule, by opening more investigations into merger cases than is really necessary. The preference for investigating mergers should vanish if our proposal is adopted.

As to sector studies, there is no reason for expecting a reduction of them as a consequence of this financing proposal. These activities generally trigger investigations at a later stage. Therefore they are also able to generate a flux of funds for the CA, although indirectly, and should not be discriminated by this funding mechanism.

Advocacy is aimed to reduce anticompetitive legislation which limits the scope of antitrust enforcement. Therefore advocacy activity, if successful, enlarges the scale of activity of an CA and, ultimately, favours the subsequent opening of investigations which otherwise could not be run under the covering of pre-existent protective legislation.

In conclusion we do not expect major distortions in the selection of activities from our funding proposal.

Conclusion

It must be noticed that the proposed funding mechanism does not cancel all other motivations which explain the actual policy of competition authorities. This mechanism will simply add an extra motivation aimed to put more emphasis on imposition of optimal fines. In this area some improvements are requested. An other aspect which must be better handled refers to the distinction between type 1 and type 2 mistakes. It has been observed (Garoupa, 1997) that a private (monopolistic) enforcer risk being excessively active with respect to less armful crimes so as to make more type 1 errors. The opposite should happen in case of very armful cases. The solution for this – according to Garoupa – could be a system of sanction to be paid by the private enforcer if the convicted individual is found not guilty after the appeal. Notice that the Dutch competition authority is under this provision despite the fact that it is not allowed to be funded with fines.

In evaluating the proposed funding mechanism, due attention must be paid to disadvantages of alternative funding methods currently adopted by most of competition authorities. Relatively evaluated, the funding mechanism based on fines seems appropriate: it adds correcting incentives to governing bodies of CAs and, *prima facie*, doesn't show problems which cannot be corrected with an appropriate choice of the percentage or absolute values of fines which the CA would be allowed to retain.

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