

**WHY SHOULD NATIONAL COMPETITION AUTHORITIES
BE INDEPENDENT?
AND HOW SHOULD THEY BE ACCOUNTABLE?**

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Should regulatory agencies be independent from the Government? Or should they be a department of a given sector ministry? More broadly, should they be independent from the Executive, Legislative and Judicial branches, or be part of one of these branches? These are important questions that come up not only when new Member States join the European Union, but when major reforms are contemplated. We will state the reasons why National Competition Agencies (NCAs), the institutions in charge of enforcing competition rules in a given country, should have a substantial degree of independence. They should be entrusted with a clear mandate and their decisions should be purely guided by technical criteria expressed in their charter, free from political or interest group pressures.

This institutional arrangement, based on a well designed organization, with talented personnel and with a competent board, guarantees the best contribution to enhanced consumer welfare and innovation.

But independence in a democratic society means accountability. These are two sides of the same coin that should go hand-in-hand. To this extent, internal and external checks and balances need to be designed towards ensuring independence, while making the institution responsible for its actions and decisions.

One major element of accountability is performance criteria. How is the board entrusted with a given mandate going to be assessed? Although a central point in running any organization, this has been seldom the object of a contract between society (or the minister in charge) and the board steering the institution.

Other important institutional aspects are the relationships between the agency and the government, parliament, and other regulators. Since antitrust law is law enforcement, in some countries decisions are taken only by courts. In all the others they are subject to judicial control.

These are difficult but important institutional issues that have been seldom addressed in a comprehensive and systematic way. I will try to address these issues based on my experience as a Central Banker, as a World Bank official contributing to building regulatory institutions around the world, as well as in my current position as President of the Portuguese Competition Authority.

1. What is independence?

The quest for independence by regulators is today well grounded in economic and political theory, largely due to work on regulatory theory and on the statutes of Central Banks.¹ In most European countries and in transition economies, the State played a major role as owner of public enterprises, and in particular of infrastructure and banking institutions. With full privatization, those firms sometimes became private monopolies. And with partial privatization in some cases the State retained a multiple role: shareholder, regulator and enforcer of public decisions at large (e.g. a public investment program). The confusion of all these functions led often to inefficiently run enterprises, with a serious cost to the competitiveness of the economy.²

¹ See Cukierman (1992) and Laffont and Tirole (1993, 1994) and Laffont (1994)

² Let us give two real world examples. First, is in the privatization itself the State as a shareholder wants to maximize the value it gets by selling the firm, so it sells the telecom company that owns two or three competing networks as a single monopoly, creating serious competition problems: high prices for consumers and exclusionary behaviour vis-à-vis competitors. Second, the State owns a large bank, that competes in the market place, but it also may use it to finance a particular investment or even a petty project and to finance the deficit of public enterprises. But we even witness cases where the State bank is

As a result of the effort of dozens of theoreticians and practitioners, and in which endeavour I had the honour to participate, in the 1980s and 1990s the European Central Bank was established as an independent institution. Other Central Banks like the British, Swedish, Chilean and the US Fed are also independent. The basis was the theory of intertemporal consistency of economic policy, and the need for reputation and credibility to be able to conduct an effective monetary policy. Of course this is not always recognised as a universal truth. Recently, a French candidate to the Presidency advocated that the European Central Bank should be under the political control of the European Council. Fortunately, it did not have any echo among EU leaders.

The level of independence varies from institution to institution, so we need criteria of independence to measure that status. Let us consider the following criteria, from lower to higher:

Level 1. Board nominated by Government with fixed term appointment, without possibility of being dismissed, except in cases of “cause majeure”, or serious breach of performance of the institution.

Level 2. Board appointed by Government or President after Parliament hearing, cannot receive directions from Government, and as in 1.

Level 3. As in level 2 plus administrative autonomy and own revenues (or earmarked revenues).

Level 4. As in level 3 plus the capability to define details of competition policies.

Level 5. As in level 4 plus the possibility to issue (nonbinding) recommendations to Government, to be consulted on Competition Assessment matters in the legislative process and being able to judicially challenge Government decisions that might conflict with competition law.

Since the board of a regulatory agency enjoys a high discretionary power in applying the rules and methodologies to each case - in fact she or he are like a judge, high level economist or a high level lawyer - the process of choice and appointment should be carefully designed. Only highly reputed professionals that have already occupied high public posts and with a high level of integrity should be appointed. The process is too important to be left only to the Government, and at least Parliament hearings should be carried out.³

What is the appropriate level of independence of an NCA is a matter for an extensive examination in each country. It depends on the institutional development and maturity of democracy of the country, the political environment, and the level of consciousness of competition issues among its politicians and the society at large. E.g. in Portugal we are at stage 1 with some characteristics of stage 2, although the NCA can also issue Recommendations to Government (as in level 5). The UK has reached level 4. And to our knowledge only the Polish NCA can challenge the Government in court.

Eliminado:

supposed to “regulate” the market by using its influence in market prices. These examples show a confusion of all three functions of a State, which leads to a sub-optimal solution in all the fields.

³ The experience of appointment only by the Parliament is not advisable either, because in actual cases, it tends to reproduce the representation of political parties, which leads to a highly politicized board.

2. Why should an NCA be independent?

First, let us look at the broad functions of NCAs. Basically, they have two important functions: enforcing antitrust laws and controlling mergers. While discharging the first function they act as a quasi-like judicial body,⁴ so this function is quite far from the political decision making realm.⁵ While discharging the second, they should follow a consistent methodology to be applied independently of the specific case and with a prime objective: control of market power. So, from this viewpoint NCAs act like a regulatory agency, promoting competition.

The framework used by regulatory theory is based on the principal-agent set-up in which the principal is the State or the regulatory agency and the regulated firm or firms are the agents. The principal maximizes social welfare under incentive constraints which result from the informational advantage of the regulated firm(s) and its strategic behaviour. According to regulatory theory, an agency should have a clear mandate regarding its mission and the objectives to fulfil. It should be entrusted with all the instruments and the required level of discretion to reach those objectives in a given timeframe. Thus, the agency mission is essentially technical and its decisions should not be, to the utmost extent, subjected to political interference.

This should not be interpreted in the narrow sense that such decisions would not affect society, since, by their nature, they are part of competition policy, which, in turn, is a key element of any government program. But if the government broadly formulates competition policy, then the agency is mainly entrusted with its implementation, as well as with the enforcement of competition rules. Thus, agency decisions should neither be subjected to the realm of political decisions nor follow the political cycle.

Political decisions in a democracy are taken by persons entrusted by the electorate to pursue a broad program. They are subjected to the test of elections. But once they are elected, they have a large discretionary power. On the other hand, economic agents, and in particular firms, need a certain degree of certainty about the enforcement of policy rules with a direct impact on their performance. In order to decrease the regulatory uncertainty, and transform it into a manageable regulatory risk, those decisions should be entrusted to an independent regulator with a specific mandate and predictable decision-making. It is difficult, if not impossible, to achieve this endeavour if decisions are not reached on the basis of sound technical criteria.

Imagine a foreign firm that contemplates investing half a billion dollars in a developing economy, in an infrastructure sector, and that does not know whether the price of the service to be provided is going to be fixed by the government, would be free, or subject to a regulatory rule. And would it be a stable regulatory rule? And in this last case, can the firm get a normal rate of return for the capital invested? The world is full of failed investments because of failure to address this problem.

Consider also a European Union where firms in each country are subjected to competition decisions based on political decisions of each government. E.g., a cartel in a certain industry would be tolerated in a given country and heavily fined in another country. The level-playing field would be completely subverted. There would be no Union.

⁴ One may argue that the courts, and only the courts, should carry out public enforcement. This is not an optimal solution, since investigation of these matters requires a specialized body of economists and lawyers fully dedicated to this function. It also requires certain police-type powers to make inspections and other investigatory functions, that are carried out by the NCA.

⁵ Enforcing competition law should also be entrusted to courts in private enforcement when a party or a class of consumers is trying to recoup damages caused by an enterprise or a coalition of enterprises.

From another political economy viewpoint, governments to be elected need funds, and campaign funds may be provided by interest groups. Moreover, interest groups influence the media and to a certain extent they can also influence public opinion. Thus, governments may end-up being influenced by those interest groups. To counteract such pressures, governments may entrust the enforcement of regulation to autonomous institutions that are not subjected to those pressures. They may even provide a clever way for governments to bypass pressure from interest groups, since difficult decisions that may go against them while increasing social welfare, would be discharged by an independent regulator. Blame the regulator, not the government.

There is another important argument. Governments are elected on an extensive agenda. It would be difficult to approve or disapprove a given government on the basis that it has approved or blocked a given merger or punished a given cartel. There is a “free rider” problem here. On the contrary, it is easy for a given electorate to judge a government based on its position on, for example, tax issues that directly impact the populace.

Let us return to the example of central banking. In the case of Central Banks their mandate is to keep price stability.⁶ As instruments they are given monetary policy, in the form of short-term interest rates (funds rate), open-market and repo operations, and others to ensure that they are able to influence its primary objective of price stability. Governments of the euro zone have even gone as far as to forbid their Treasuries to monetize the deficits (e.g. by obtaining credit directly from the Central Banks) in order not to interfere with the implementation of monetary policy. And some countries, like New Zealand and Australia, have even written contracts in which the remuneration of the board is linked to reaching targets.

The same type of independence is required in the area of competition enforcement. Imagine a NCA that bows to political pressure: with a more “pro-business” party in power it approves mergers in highly concentrated sectors; and with a more “pro-consumers” party it uses structural remedies to impose the break-up of those companies. This is again the serious problem of intertemporal inconsistency. This would entail large business uncertainty, large regulatory costs and certainly would prevent economic growth.

Moreover, if these arguments apply to a sector regulator, they should apply a fortiori to competition agencies, because competition rules apply to all firms of a given economy, independently of their sector. The transversal or horizontal nature of competition rules has a macroeconomic impact, more precisely a general equilibrium impact, which means that a higher level of independence is required.

The most important conclusion from the extensive literature on the institutional aspects of Central Banks is that their effectiveness in implementing monetary policy depends crucially on their credibility or reputation. In the case of Portugal, when I joined the Board in 1982, the Central Bank had a history of two decades of high inflation, so despite the reform to give it independence and the stance in policy to tie the escudo to the ecu basket, it took three painful years of fighting currency crises to build the credibility of the Bank.

Building reputation may require a long-time and a substantial effort. And the irony is that the institution can lose long-achieved reputation in a glimpse of a moment or just with a single action or decision. It is almost as hard to maintain as it is to gain credibility. These are virtues that we have to win and maintain every single day in every single act or decision.

⁶ In the case of the ECB, the mandate is to ensure a rate of price increase of the harmonized price index, in the euro area, below 2% per year, on average over the medium term.

The same applies to an agency entrusted with enforcing competition rules. To be able to dissuade unlawful behaviour of the firms it needs to gain reputation. What cartel is going to be afraid to enter into price fixing agreements if its participants know that the NCA will not step up to their door and investigate the facts? What dominant firm will restrain from predatory behaviour to fight its “attackers” (smaller competitors) in order to preserve its large market share intact?

Again, the example of a Central Bank is illuminating. A Central Bank is not able to establish its reputation unless it is willing to raise its interest rate whenever necessary and risk be labelled a hawkish Central Bank, in order to fight inflationary expectations. In the case of Portugal in the 1983-85 period, the Central Bank raised interest rates above 20% and had to intervene in foreign exchange markets by spending about 10 billion dollars in order to fight inflation and establish its credibility, measured in terms of maintaining the parity with the ecu basket.

In similar circumstances a NCA cannot refrain from fining the gravest of antitrust violations up to the maximum limit, in order to dissuade firms from violating the law. In quite a number of EU States that can go up to 10% of annual turnover.

One of the major decisions confronted by a young NCA is whether it should start by applying the harshest sanctions right from the beginning or apply them only progressively through time. There are good reasons for both positions. If the NCA wants to dissuade immediately, and sometimes break away from a history of ineffectiveness, it should not refrain from going up to the maximum. But some may argue that a culture of competition has to be built gradually and that a violent change from the past may produce a back-lash and induce negative political reactions against the NCA.

However, the reputation theory gives a clear answer to the above trade-off. Let us return to the example of the Central Bank. A soft position on fighting inflation where the bank raises interest rates only gradually and on the tail of inflation rates is completely ineffective: inflation would just keep rising. A “cold turkey” approach is required: by increasing interest rates clearly above inflation, inflationary expectations are checked and the bank gains credibility. It may take some time for economic agents to learn that the central bank is serious about bringing down inflation, but it would finally succeed. The same would happen in creating credibility (power of dissuasion) for the NCA. The problem is even more serious for fighting cartels. It is now widely recognized that a leniency program is required to detect cartels. But unless costs for the violators are raised significantly the program will not be effective.⁷ Eastern European countries prove this fact again and again.⁸ A fining policy should be clearly front-end loaded.⁹

3. Democratic control means NCAs also have to be accountable

We identified above criteria for independence and have established different increasing levels of independence. To each level of independence there should correspond a compatible level of accountability.

⁷ The theory of leniency has been exploited by Motta (2001) and Harrington (2005), among others.

⁸ Assume that a cartel gets an annual benefit of 10% of its turnover, and that the NCA usually only fines up to 5%, then it is clear that the benefit of going on with the cartel clearly outweighs the cost of being caught or confessing the violation.

⁹ A survey result for the UK (Fingleton) show that what business fears most is imprisonment and sanctions that forbid a manager to exercise his profession for a certain period. But this requires criminalization of cartels.

The first control of the activity of a regulatory agency relates to its budget: the overall amount of its resources and the specific allocation. The second is control of how it can use its allocated funds: administrative budgetary procedures and rules. . The third relates to its overall and detailed annual plan and the fourth its strategy and business plan.

Nobody can dispute that a NCA should be subject to the same strict rules and procedures relating to use of resources or personnel management of a public institution; the problem is when the accountability is used to control the agenda of the NCA, and influence it in specific cases.¹⁰ Moreover, it is now widely recognized that regulatory agencies need to attract highly qualified economists and lawyers, because it will be confronting the most qualified professionals in defending the cases or in courts. So, in order to protect the public good their case has to stand, when they are defending the law. In order to attract those specialists it should have a pay scale that competes with private lawyers and consulting firms. This usually means that NCAs should have a small but highly competent body of professionals, and has to pay them accordingly. The pay scales and hiring practices should be comparable with those firms, rather than with the public administration.

Thus, regulatory agencies should have a specific set of rules for budgeting, procuring services and hiring and firing consistent with their type of activities. They should have an internal auditing and external auditing system to control their procedures in these matters.

Moreover, similarly to any public service, they should be subject to an Auditing Court.

Let us look at other types of accountability. In order to illustrate these checks and balances¹¹ let us define the following criteria of accountability:

Level 1. Annual Plans and Budgets, in broad terms, have to be approved by the Ministry in charge. They depend on the general budget allocation of the respective Ministry. Annual reports and budget implementation are subjected, in broad terms, to approval by the Ministry in charge.

Level 2. Business plan (3-4 years) discussed with stakeholders. Ministry approves only the broad budget. An Advisory Council of enterprise associations, universities and consumer associations provides advice on strategy and general performance. The NCA is subjected to annual hearings by the Parliament. The Ministry approves annual accounts and annual report.

Eliminado:

So, the main difference between level 1 and 2 is that part of the control exercised by the Ministry is replaced by an advisory body representative of the stakeholders.

Level 3. As in level 2 but now the NCA has earmarked resources or own revenues that do not depend on a discretionary decision of the Ministry. Budgetary resources may function as a residual source.

In the case of Portugal, the NCA has its own resources established by a percentage of the service charges collected by sectoral regulators.¹²¹³ In the case of

¹⁰ There was a case in a Latin American country where the Ministry threatened to cut drastically the budget of the energy regulator if it did not follow the directives of the Government on a specific issue.

¹¹ The most important external checks and balances provided by courts is dealt with in section 6.

¹² The rationale is that the NCA also provides regulatory services to those sectors.

Greece all firms when they register to start activity pay a small fee that accrues to the NCA.

Which is the appropriate level? Only a case by case approach can respond to that question. In our view, it is the level of accountability that should determine the level of independence.

The above taxonomy refers mainly to external constraints. However, because NCAs are quasi-judicial bodies, they should also be subjected to internal checks and balances. Due process is also a major requirement: for each case, investigation should be conducted separately from decision-making. Some countries have gone as far as to allocate each phase to a separate institution. This is the case of France and Belgium. What are the pros and cons of this arrangement? The main advantage is a complete separation of both procedures. However, judging from the fact that in the last years more reforms have tended to institute a single agency, the cons are now viewed as more important. The dual agency solution has the drawback that it creates duplication of a number of individual procedures, and raises the serious problem of lack of coordination. Sometimes each agency blames the other either for not investigating important cases or for reaching decisions that are contrary to the investigations carried so far. More importantly, since there is always the judicial control, agency procedures are under intense scrutiny.

The solution for a single agency solution is to keep the two procedures separated by “Chinese walls”: e.g. the department directors being responsible for investigations and the Board being responsible for decisions. Some institutions also have separate legal services, or a chief legal officer and a chief economist that provide additional technical expertise, independently from the operational departments, to the Board. Others have designated board members in charge of preparing the decisions, with final votes being taken by the Board as a whole.

4. Measuring performance and impact

The NCA has its mandate specified by the legislative branch, but enforcement – i.e. the practical use of instruments to reach the targets, and the actual level of target achievement are essential to measure the performance of the organization. How is the performance of competition authorities to be assessed?

Let us again look at the case of the Central Bank. A measure of its performance is the inflation rate observed during a given period¹⁴. But we cannot measure performance in such a naked way. We need to define a counterfactual: how policy has changed the non-policy trajectory. And this last trajectory depends crucially on the shocks that have affected the economy (e.g. was there an oil price shock?). But even that trajectory depends on inflationary expectations, so we recognize the credibility level of the Central Bank – should it be based on the past? In order to measure these factors we need a macro-econometric model. And the objective function may be more complicated, if also unemployment or GDP growth is taken into account.

The case of NCAs is even more complicated, since dynamic general equilibrium and empirical models are not yet available. So we have to settle for a more limited approach. Direct measures could be: number of cases processed, output in terms of mergers processed and sector inquiries undertaken, or complaints processed. But there

¹³ There is still some discretionary decision, since the annual rates for sharing those resources have to be approved annually by the Ministers, and the general law only establishes a maximum share.

¹⁴ Here we should recognize that, in certain circumstances, changing the interest rate may only significantly impact the inflation rate about 1 to 2 years later.

are simple and complex cases and economic impact differs substantially from case to case. We need to develop quality and complexity measures of cases: still measuring direct input.

To move towards measuring output we require a more sophisticated approach. We first have to have some form of measuring the impact of NCA decisions in terms of economic welfare. Market distortions always cause a deadweight loss in the short term and have a dynamic impact by decreasing innovation and economic growth. These dynamic aspects are more difficult to measure, and the static effects are usually of a second order of magnitude.

However, there is an important factor that is central to the NCA activity. Anti-competitive behaviour generates a transfer from consumers to enterprises. This the economic benefit appropriated by firms through an increase in profits. An economist may disregard this effect, but anti-trust law, designed to increase consumer welfare, should give it centre stage. It is a question of justice: if the firm or firms had not engaged in the unlawful behaviour, consumers would have enjoyed a higher level of consumer surplus. By fining firms at least the level of the unlawful transfer, the NCA obliges its restitution to the benefit of the state: in other words, to the benefit of general taxpayers, that may coincide largely with consumers.¹⁵ In class actions through the courts individual consumers that can prove to have been affected can get restitution.

Taking this perspective, a first approximation of the impact of the NCA is the amount of fines imposed.

Measuring the direct economic impact of cartels, mergers and abuses of dominance requires a more elaborate methodology. Let us take the case of a cartel. A cartel raises the prices and lowers output in the respective market, and so has a negative impact on consumer welfare. There is a transfer from consumers to firms and a pure deadweight loss.

But for each fine imposed, more firms will be dissuaded to take or continue unlawful behaviour: that is the deterrence effect. According to OFT for each cartel uncovered, there are four that cease the violation; for each abuse of dominance condemned, two cease the violation; and for each merger blocked, there are six that may potentially decrease substantially consumer welfare and thus are discouraged.¹⁶

But all of these effects have been shown to be of a smaller magnitude, when compared with the dynamic impact on innovation and growth.¹⁷

5. The institutional environment: sectoral regulators and NCAs

NCAs enforce competition rules, and these rules apply to all sectors of the economy. There are no valid arguments to exclude a particular sector, or a particular type of institution (e.g. private or public enterprises, cooperatives, professional associations, etc.). They sanction behaviour that violates competition laws: abuses of market power or cartels should be prosecuted independently of the sector where they originate.

Sector regulators apply technical or economic regulation to a specific sector. They sometimes substitute themselves to the managers of the regulated firms to specify prices, quantities or qualities.

¹⁵ From a more legalist viewpoint, a fine is mainly a deterrence instrument, so there is no connection between the fine and taxpayers. The fine is a way to re-establish the public good that has been offended. This a view defended by among others Wils (2005).

¹⁶ n John Fingleton, personal communication.

¹⁷ See Nicoletti e Scrapetta (2007).

Both types of regulators are required. Regulation constitutes an exemption to application of competition rules. However, since the market is the best mechanism for resource allocation, regulation should cease where there is already enough competition.

From these principles we deduct that both types of regulators are essential and they should be specialized in their respective domain. It is a mistake to entrust a NCA with the regulation of a particular sector. And in view of the fact that enforcement of competition rules should be horizontal and across all sectors of the economy, it is our view that sector regulators should not be entrusted with their implementation.

An area that is sometimes disputed is merger regulation. Sector regulators claim that they know more about the particular sector and are technically better placed to analyse the merger. However, there are very strong counter-arguments. The methodology for analysis of merger impact is similar across all sectors, and the sector regulator can be more easily captured by the regulated firms.

Whatever the institutional arrangements or division of work it is clear that regulators need close cooperation in all areas. In both mergers and antitrust cases, sector regulators should give their opinion. However, the final decision should be the responsibility of the NCA. There is only sector where the sectoral regulator should have the same level of responsibility, in the sense that if he rejects the merger, than the NCA cannot approve: that is the case of media, where questions of cultural and political diversity may be at stake.

6. The institutional environment: courts and government

As we argued extensively above, NCAs should always be subject to the external checks and balances of courts. In the end, public enforcement of the law should be a prerogative of the courts. NCAs assume a quasi-judicial role, since they issue administrative decisions.

Experience in most of the European countries shows the need to have specialized courts for competition matters or sections in a given court specialized in these matters. It is a major institutional failure, experienced in quite a number of countries, when we have dozens of specialist economists and lawyers in the NCA highly competent in these matters, and then the cases end up, on appeal, being dismissed by judges that have no basic knowledge of competition issues. So, institutional development should always go hand in hand: the administrative body and the court system.

In the end, what the country needs is a body of case law that clearly enforces anti-trust law and constitutes a clear set of rules for business to follow. Sometimes it takes time for the NCA to refine its procedures and due process to satisfy the general legal process of the country, and for the judges to realize the major importance of competition matters. It requires patience and nurturing by the European Commission and the European Courts.

The need to develop the court system becomes even more important from the perspective of private enforcement and the launching of class actions.

Another problem in several European countries relate to the long time required for judicial decisions to be reached, with successive appeals and stays in the court decisions. This is a problem of the legal process in quite a number of countries.

It is clear that Governments have no role to play in the judicial process, due to the separation of powers in a democracy. However, should Governments interfere in merger control? This is a question of a large debate, especially given the experience of

Germany that has influenced some countries, and France and Spain where merger decisions are taken by the Economics Minister.

In view of the arguments we have stated, we think that all the decisions on mergers should be taken by the NCA, with recourse only to the judicial power. The German exceptional recourse to the Minister of Economy, in case the merger is blocked, raises not only a problem of conflict, puts in jeopardy the reputation of the NCA, and moreover, subverts the balance of the decisions. In fact, if only rejections can be overturned, it means an increase in more false negatives being accepted,¹⁸ with serious consequences for economic welfare.

7. Conclusions

We have concluded that the process of liberalization and the institution of a market economy needs the enforcement of competition policy in order to control market power. Moreover, the privatization of infrastructures has created private monopolies, whose market power needs to be regulated, as do natural monopolies or other market failures. Regulation is thus essential for the functioning of a democratic society and a market economy. The decisions regarding these functions are either of a quasi-judicial nature (e.g. administrative decisions to fine a cartel) or very technical in nature. So, they should be de-governmentalized and entrusted to an independent regulator in order to reduce business uncertainty and the discretionary nature of political decision-makings. Thus regulators should have a clear mandate, have the freedom required to apply the rules and be accountable for their decisions.

The problem of accountability, or incentives given to fulfil their mission, is a major one, rarely dealt with in regulatory theory. The nature of their decisions, where a good or bad decision could affect social welfare in the order of millions or billions of euros is not amenable to a simple linear contract solution.¹⁹ Since it is difficult to link performance to rewards, the best solution may still be to have a strict system of choice of the board, where members have an acute sense of social responsibility.

Moreover, there is a serious problem of monitoring and measuring outcomes. However, some approximation has to be taken and there are different ways suggested above to measure the performance of the agency.

We put forward some arguments defending that NCAs should have the power to apply competition rules throughout the economy, they should cooperate with sector regulators, but have the ultimate power of decision on antitrust cases and in mergers. We also defended that decisions on mergers should not be subject to government approval or reversal for the same reasons that regulation should be out of government hands.

Finally, we stressed the important role courts play in competition law enforcement, both in judicial control of NCA decisions and in private enforcement, and that institutional development requires that both the NCA and the court system have to be developed in a balanced way in order to produce a clear body of jurisprudence that can be the basis for the set of rules that business understands and respects.

¹⁸ Mergers that should be rejected are approved. The problem spills over all other mergers. In cases where negotiations take place to accept a merger based on conditions and obligations, it may be difficult for the NCA to impose remedies because the firm may prefer to have the merger rejected and then use recourse to the Minister.

¹⁹ Even in the case of Central Bankers we do not observe that their salary is related to the outcome of inflation.

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