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Audit Quality: Attributes, Private Safeguards and the Role of Regulation*

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Abstract

This article examines the private mechanisms used to safeguard quality in auditing, with a view to defining rules capable of facilitating the performance of market forces. An outline is given of a general theory of private quality assurance in auditing, based on the use of quasi-rents to self-enforce quality dimensions. Particular attention is paid to the role of fee income diversification as the key ingredient of private incentives for audit quality. The role of public regulation is then situated in the context defined by the presence of these safeguard mechanisms. This helps in defining the content of rules and the function of regulatory bodies in facilitating and strengthening the protective operation of the market. By making sense of the interaction between regulation, quality attributes and private safeguards, the analysis helps to evaluate the relative merits of different regulatory options.

JEL codes: K22, K23, M40

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1 Attributes of auditing quality which are crucial for regulation

The demand for auditing services arises from a need to facilitate dealings between the parties involved in business relationships—shareholders, creditors, public authorities, employees and customers, etc. Exchanges between such parties are usually costly since informational asymmetries give rise to uncertainty concerning the performance of the contractual obligations. In this context of contractual opportunism and, along with other instruments and safeguards, accounts are used to enhance the likelihood of performance and demonstrate a willingness to perform to potential contracting parties.[1] The preparation of accounts is controlled by one of the parties only (either the executives of a large company or an individual businessman in smaller undertakings). In this way, figures can be produced at lower cost but they are also used—perhaps principally—for internal management and control purposes. This dual capacity of executives and businessmen as agents to be monitored and as those responsible for actually preparing the accounts reduces the value of the latter to third parties. A review of accounts by an independent expert, the external auditor, is useful to enhance their reliability in the eyes of other contracting parties who are not involved in their preparation. There is thus a demand amongst companies for independent auditing to reduce their contractual or transaction costs. This has been verified empirically by observing that the increased contractual conflict resulting from a greater separation between ownership and control or a higher level of indebtedness leads to greater demand for auditing services. It has also been observed that contractual costs fall largely as auditing quality is increased.[2]

[1] This view of auditing is derived from Jensen and Meckling (1976: 338-9).

[2] A large number of empirical works have in fact verified the existence of a positive relationship between different variables which are connected to the intensity of agency costs and the choice of higher quality auditors. In a retrospective analysis, Chow (1982) showed that in 1926, prior to legislation in the United States making auditing obligatory, voluntary demand for auditing amongst American companies depended on different indicators which it seems reasonable to believe were directly related to the degree of conflict between management, shareholders and creditors. Such indicators included the proportion of shares not owned by management, levels of indebtedness, the size of the business and the number of clauses linked to accounting information in loan agreements. Other empirical studies have demonstrated the significance of agency cost variables on change of auditor, revealing the expected effect even after taking account of varying client size and growth, the variables considered to have the greatest influence on change of auditor decisions. (See, in particular, Francis and Wilson [1988], as well as Defond [1992]). This is also shown by the fact that most companies which go public on the Stock Exchange (and therefore increase potential

Auditing quality depends on the ability of the auditor to carry out a thorough examination of the accounts and detect possible errors or anomalies (*technical competence*) and his willingness to provide an objective opinion on them (his *independence*).[3] Careful consideration of these two dimensions and the quality safeguards that are provided by the market is crucial for regulation to be efficient. In particular, technical competence can be hindered and independence trivialized if auditors are not allowed to exercise their professional judgement (Section 1.1). In addition, independence is not only a matter for the parties that are directly involved but also concerns third parties, mainly other clients (Section 1.2).

1.1 Professional judgement

Auditing increases the informational value of the accounts and it is therefore desirable that the auditor's opinion should reflect as much information as possible. For this reason, it is very important for the auditor to incorporate into his report a picture of the audited business based on facts known to him, even if these facts are difficult for third parties to verify. This possibility will be referred to as the exercise of *professional judgement* by the auditor and it is a crucial attribute of auditing quality because it substantially enhances the informational value of auditing for third parties. Since they have to convey unverifiable information, it is not sufficient for auditors merely to be independent. What is required of them is that they exercise their professional judgement independently. It would be prejudicial if, in order to preserve their independence, auditors were obliged to refrain from making a professional judgement since the latter provides valuable information to those using the company's accounts.

This, in broad terms, is the argument as to the relative nature of auditor independence in terms of information economics propounded by Grout, Jewitt and Whittington (1994). In

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contractual conflict) switch auditor to one of the large firms. Carpenter and Strawser (1971) documented this in the United States in a classic study. It has furthermore been shown, with companies going public, that the greater their agency costs the more likely they are to obtain audit services from larger firms (Firth and Smith, 1992).

[3] This definition of quality comes from the so-called Positive Accounting Theory. See, in particular, Watts and Zimmerman (1986: 314-5; 1980: 8) and DeAngelo (1981b: 186). In terms of technical competence and independence, it provides a useful breakdown for analysis since it defines two *relatively* distinct problems and therefore enables specialized rules and practices to be devised to support each of them. The two dimensions are not totally separate, however, in that a lack of independence may come to light in decisions which reduce effective technical competence as when the auditor decides not to make an effort to discover problems which he does not wish to report on.

developing their argument, they use a fundamental distinction made in modern information economics—in particular, in the theory of incomplete contracts—between information which is merely *observable* by the parties (in this case, the auditor) and that which is also *verifiable* by third parties (here, the legal system).[4] The auditor can use two types of information in his professional judgement: what they call "hard" information, which is observable and verifiable, and "soft" information which is observable but not verifiable. Specifically, they assume (although similar conclusions can be reached on more restrictive assumptions) that, in the case of auditing, hard information can be suppressed from the accounts but not equivocally transmitted. Soft information, on the contrary, can be transmitted only in an equivocal and subjective manner.

In order to maximize the value of auditing, the regulatory framework must make it possible for auditors to use this soft information regarding the client and transmit it to the market and third parties. To this end, they must exercise their professional judgement on both categories of information. In fact, if the regulatory framework penalizes them excessively, they will only make use of the hard information so the audit will contribute less information and may sometimes even be misleading. An auditor might, for instance, play safe and disclose his reservations even when he considers that the client's situation would not warrant such reservations after taking into account the soft information available to him, which he is not, in fact, allowed to transmit.[5]

Using this type of distinction, negotiation between auditor and client as to the content of accounts should be positively reconsidered. This gives accounts a more subtle and contextual

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[4] Grossman and Hart were pioneers in differentiating between observable and verifiable information in their article on vertical integration (1986).

[5] Evidence regarding auditor switching provides indirect indications that different economic agents have access to, and can verify, varying types of information. Krishnan (1994) found that a change of auditor is more likely when the auditor gives a qualified opinion applying apparently conservative criteria in relation to the *observable* financial position of the business. The results of another study (Krishnan and Stephens, 1995) are consistent with the following explanation: the first auditor has private information which leads him to be conservative, and the second also has access to this information and therefore does not modify his opinion compared with that of the former auditor. Obviously, he too cannot previously commit himself to issuing an unqualified opinion given his lack of knowledge of the client. Although the set of information which is verifiable by a judge probably includes all the information observable by researchers carrying out this type of empirical study, a comparison of the two situations has at least an indicative value to the effect that those participating in economic activities use sets of information with different properties in terms of observability.

informative function: "the most informative thing about accounts as currently prepared might not be the literal interpretation of the information they contain (claimed debt-equity ratios, profits, etc.), but the fact that an apparently competent group of professional auditors, after exercising their professional judgement, is prepared to let the company make the claims that it does, even though the auditors thereby leave themselves open to the possibility of large law suits" (Grout *et al.*, 1994: 332). The role of auditor decisions is thus understood in the context of how recipients of accounts process the information. Assume, for example, that an auditor agrees to suppress detailed hard information in such a way that the accounts only include a generic and ambiguous statement of the "including adjustment of taxation reserves" type. It could be argued that this phrase is sufficient for readers to assume the worst in relation to the amount affected, which is not divulged.[6] However, the recipient of the information will assess positively the fact that the auditor has agreed not to detail the information, taking it as a signal of confidence. The reader knows that the auditor is taking a risk and assumes that he would only do this if he considered that the matter would be unlikely to give rise to future litigation or loss of reputation. In other words, the suppression of negative hard information from some audited accounts in itself implies the dissemination of positive soft information. "In the signalling equilibrium, a statement like 'including a transfer from taxation reserves' has a conventional meaning: the client firm has soft and hard information that together exclude the worst possible cases. Firms who are regarded by creditors to have sufficiently high expected collateral value (conditional on the accounts) receive continuing financing and, for the time being, are allowed to proceed with their business plans" (Grout *et al.*, 1994: 335).

This analysis has far-reaching consequences for both the ends and the means of legislative and regulatory policies in the auditing field. In the first case, it justifies legislators and regulators adopting the objective of optimizing the value of the information which the audit provides to users. They should therefore consider that the rules define the type of audit which it is possible to carry out. Secondly, with respect to the means for bringing about this objective, regulations which purport to achieve maximum independence can prevent auditors

[6] This was the situation in the Royal Mail case, dealt with by Grout *et al*. (1994: 333-4).

from transmitting the soft information available to them. If they have to base their opinion on hard information only, the audit will be likely to have less informative content, however.[7]

From this point of view, when defining the context in which auditors work, legislators can make as many mistakes in one direction as in the other, laying down the rules in either too lax or too stringent a manner. If the rules are too stringent, auditors will tend to carry out "defensive audits" and only use hard information since this can be used as a defense in litigation. Moreover, they will refuse to base their decisions on soft information which will not assist in their defense if the client ends up with problems in the future. If the rules are too lax, auditors might bow to the demands of their clients and be very lenient, giving their approval to companies which do not warrant it in view of their high degree of vulnerability.[8]

However, this consequence cannot be generalized. This may be the conduct of some auditors but the market provides incentives for at least some of them to develop a reputation for exercising balanced professional judgements. Let us consider an extreme case in which the law does not provide any system of sanctions against auditors and it is also impracticable to sue them. It is foreseeable that in such a situation there would be greater development of private enforcement and sanctioning instruments. These would be based on the auditor's reputation and the castigation of underperformance through switching decisions.[9] Firstly, there is no doubt that in this situation auditing firms have incentives to develop a good professional reputation since there will be clients who demand auditing with an optimum degree of independence and this would not be the outcome of a very lax legal system. On the other hand, there is no risk that the market will itself generate an excessive level of sanctions, which would be equivalent to a situation of excessively stringent rules, because the market is probably more competent than the legal system when it comes to verifying qualitative information for several reasons: (a) the market is not restricted to the use of specific types of evidence; (b) it acts by accumulating an almost infinite number of individual decisions and therefore individual variables are of little importance; (c) such decisions are taken largely by professionals who can be assumed to be well-informed because they have incentives to be informed; and (d) negotiating costs in this case are nil (as compared with their equivalent in a legal process or

[7] The report from the Centre for European Policy Studies on the proper government of companies shared this view in relation to the regulation of accounting information by statutory rules in continental Western Europe (CEPS, 1995, p. 18).
[8] As do Grout *et al.* for example (1994, p. 336).

out-of-court agreement). As a result, much of the information which is observable by auditors but not verifiable by the legal system is verifiable by the market, and auditors will have no hesitation in using it if the potential sanction comes from the market rather than the legal system.

There is thus substantial asymmetry between the consequences of the two types of regulatory error. The risk with laxity can at least in part be corrected by the market and, moreover, does not pose obstacles to using all types of information. The risk with excessive strictness, on the other hand, cannot be corrected: all auditors, whatever their reputation, are forced to dispense with soft information when preparing their professional judgements. Moreover, if there is greater variability in the sanctions of a legal type, this adds force to the argument that increasing them tends to bias the content of the audit, making it less informative.

1.2 The impact of independence on third parties and other clients

Regulation should also take into account that the asymmetry and conflicts arising in relation to auditing quality are more complex than in most markets since it is dealing with contractual facilitation with at least three interested parties (clients, auditors and users). In this respect, auditor independence is the most conflictive attribute. Firstly, the role played by auditing in third-party contracting means that the client will require independence or otherwise depending on his situation. In problematical cases, although the client in principle usually wants high-quality auditing, after his financial situation changes he may prefer a low-quality audit in terms of independence. More precisely, he would prefer a dependent auditor who is perceived by third parties as being independent. This is because a deceptive audit will enable him either to contract with third parties on better terms than those otherwise available in his situation if known to such third parties, or to postpone the review of those contracts which involve corrective action based on financial situation (as normally occurs, for example, in the case of loan agreements).[10] In order for this deception to have the desired effect on third parties, these third parties must obviously attribute the auditor with superior quality to that which he is actually providing since, otherwise, they would discount a favorable report and the report would lose its value in terms of evidencing the client's situation.

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[9] There would also be a wider role for competition amongst certifying bodies.
[10] See, for example, Smith and Warner (1979).

Third parties who enter a contract trusting in an audit which they believe is independent are not the only economic parties damaged by a deceptive audit. They are perhaps not even the most damaged parties when the legal system imposes strict professional liability on the auditor because other clients of the auditing firm will also be harmed. If it is assumed, specially by third parties, that auditors generally provide a uniform level of quality in their audits (particularly in terms of independence), clients who continue wanting an independent auditor to demonstrate their financial good health will see their names associated with that of an auditor tainted by lack of independence. Moreover, unlike these clients of the auditor, affected third parties can have recourse to the legal system to obtain compensation for any loss caused to them by the lack of independence.[11] They also have the active presence of professional bodies to support them along with regulators of the auditing profession and the securities market supervisory bodies.

As a result, to a large extent the conflict regarding independence does not manifest itself so much between auditors and those using the accounts of a client in a difficult situation as between auditors and their other clients who do not wish the independence of their auditor to be diminished.[12] The cost to one of these clients of his auditor reducing quality and this being visible (through a scandal, for example) arises not only in respect of the direct loss to him from the fact that those using his accounts have less confidence in them, but also because of the deterioration in "specific" assets, those whose value is associated with continuity in his

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[11] This compensation may also be excessive in those countries in which the auditor is subject to a system of joint and several liability, including several continental countries (Buijink *et al.*, 1996: 96).

[12] Readers familiar with management practices and the economic literature of franchises will recognize in this conflict a structure that is very similar to that often arising between franchisees of the same franchisor. Franchisee establishments tend to reduce the quality of their services to the prejudice of the reputation of the brand name and its network of establishments. For this reason, an essential function of the franchisor is to safeguard quality and take disciplinary measures against those who do not fulfil minimum standards. When taking disciplinary measures such as expulsion, the franchisor does so to the benefit not only of himself but, and perhaps principally, to the benefit of the other franchisees. It is believed that the periodic collection of commissions of a variable nature (which incurs a cost in lessening the incentives of franchisees) is precisely aimed at giving the franchisor an incentive to carry out this disciplinary function effectively. See the works of Rubin (1978: 227), Brickley and Dark (1987: 410) and Lafontaine (1992: 279). Moreover, litigation brought by franchisees against their franchisors as a result of inadequate control of members of the network is commonplace. A famous case in the United States was Creel Enterprises vs. Mr. Gatti's. The former sued the franchisor as it was harmed by the repeated breach by another member of the chain of obligations imposed on all the franchisees (Johnson, 1992: 18).

relationship with the auditor.[13] If, by way of reaction, he decides to change auditor, he will lose all these assets. Alternatively, if the client decides to continue with his original auditor, he will suffer a loss in terms of the diminished value of the audit to recipients and, therefore, in terms of the increased agency costs he will incur in his relationships with them. Since the scandal affects his negotiating power with the auditor, if he decides to continue the relationship, he can be expected to transfer part of this loss to the auditor by means of a price reduction. (From this point of view, the need to discipline the auditor who compromises his reputation for independence helps explain why, under a system of freedom of contract, auditing contracts are entered into on an annual basis, despite the fact that the relationship usually lasts for a much longer period of between 30 and 40 years).[14] From this perspective, it can therefore be argued that regulation should modify its current emphasis on the effect that auditing failure has on third parties because, in so doing, it would strengthen market incentives

2 Private quality safeguards and the role of regulation

Quality can be ensured by both explicit and implicit contracting. With the former, breach by the supplier can result in litigation and a consequent legal sanction. This method is in general only used for certain types of breach, without doubt due to its high cost and rigidity and, in particular, the fact that in order to be effective the breach must be verifiable by third parties. In the case of auditing, for example, an auditor may be obliged to compensate those affected by the insolvency of a company whose accounts have been defectively audited. With implicit contracting, on the other hand, the penalty for breach is imposed by potential contracting parties withdrawing their confidence from the person in breach and, as a result, not contracting with

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[13] Specific assets are resources that are more valuable in their current use than in their best alternative use. Seminal works in this area were Klein *et al.* (1978) and Williamson (1975 and 1979). The idea that asset specificity economizes in safeguards was suggested generally by Klein and Leffler (1981: 627-9) and applied to auditing by DeAngelo (1981b: 193-4).

[14] For European companies, data from Ridyard and De Bolle (1992: 89-91) enable the average rotation period to be estimated at between 30 and 40 years. Large companies seem to have a lower rotation rate. Thus, in a study of 3,500 audits carried out between 1980 and 1988 in England it was estimated that the average length of each relationship was 40 years ("Auditors Too Cosy with Clients?" [*Accountancy*, January 1995: 11]). Ridyard and De Bolle provide similar data for Great Britain: in a sample of 137 large companies, the rotation rate was lower than 1% between 1987 and 1990 (1992: 89). The figures are similar in the United States where rotation affects a percentage of between 1% of large companies and 6% of small

him or demanding more onerous terms from him. The clearest example is the loss of reputation which is usually associated with the disclosure of any type of breach. It will be shown that with auditing the loss of clientele which accompanies public awareness of deficient audits is very high. The advantages of implicit over explicit contracting lie in its automatic nature and its scope: more information is processed at a lower or nil cost since, as this information is a by-product, no administration cost is required. Moreover, decisions to sanction are decentralized. At root it is each individual potential contracting party who in part acts as a judge of the auditor's conduct. This makes it possible to process a greater quantity and variety of information in such a way that non-compliance can be penalized in a more appropriate manner. Unlike the legal system which must often deal with discrete criteria of the "all or nothing" type, the *quasi-judicial* operation of the market thus provides for a whole range of sanctions.

For these reasons, a large proportion of quality safeguards in both auditing and other economic activities basically arise in the form of "implicit contracts". In these, compliance with obligations cannot be judicially enforced, but depends on the internal incentives of the parties, especially those which generate reputation. The mechanism on which such implicit contracts are based is thus the benefit to the party who is obliged to perform them. This type of benefit is a "quasi-rent", meaning the difference between the remuneration for any productive resource in its current use and the maximum remuneration which would be received for its best alternative use.[15] In order for implicit contracting to be effective, there must be a credible commitment that the agent—in this case the auditor—will receive a stream of quasi-rents giving him the incentive to perform properly.

There are various more or less costly ways in which an economic agent can be placed in a position where he has an incentive to perform his obligations rather than be penalized by the market—i.e., by his potential contracting parties.[16]

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companies each year (see the studies cited by DeAngelo (1981b: 188-9) and Beck, Frecka and Salomon (1988b: 68-9).

[15] Studies into how the expectation of obtaining a stream of quasi-rents in the future provides an automatic incentive for producers to preserve the quality of their products or services were begun by Becker and Stigler (1974) and developed by Klein and Leffler (1981), Williamson (1983) and Shapiro (1983).

[16] The following has been developed more fully in Arruñada (1999: 24-34).

2.1 High-cost safeguards

There are two main types of high-cost strategies for assuring performance. First, advertising and other types of marketing generate a "brand-name capital" In particular, advertising, perhaps the most conspicuous of such outlays, generates an "advertising capital" which serves as a guarantee, even when it is not directly informative: simply having advertised provides an incentive to sell a good product of uniform quality which does not let down expectations. For this reason, advertising impacts, once achieved, constitute an intangible asset whose rapid volatility as a consequence of defective performance amounts to a substantial advantage in effectively acting as a quality safeguard.

Second, regulatory authorities can also replicate reputational incentives by establishing or allowing the establishment of barriers to engaging in the activity. Such restrictions, accompanied by selection of entrants based on potential technical competence, have in fact been the formula traditionally used to guarantee a minimum level of quality in all types of professional services, often under a system of self-regulation by the profession itself, both explicit and implicit. These barriers to entry generate quasi-rents. Consequently, they may ensure a minimum level of quality if producers confront expulsion—and loss of quasi-rents—as a result of malpractice.

However, both possibilities are costly from the social point of view and some are inapplicable to auditing. Advertising consumes actual resources and is also prohibited under the regulations of many European countries,[17] even though there may be no reason to justify this prohibition which, based on available empirical evidence, is prejudicial to both competition and quality.[18] Generating incentives by entry barriers, on the other hand, poses all the problems inherent in the restrictive regulation of professional services. Essentially it is of doubtful effectiveness and involves a serious risk of monopoly and regulatory capture. It thus generates direct inefficiencies by raising prices and consequently restricting supply, as well as

[17] Within the EU, advertising is allowed in Austria, Denmark, Finland, Greece, the Netherlands, Norway, Sweden and the United Kingdom (Buijink *et al.*, 1996: 53). Moreover, even in some of these countries the unsolicited offering of audit services is prohibited, specifically in Austria, the Netherlands and UK. Outside the EU, advertising is permitted, with different qualifications, in Australia, Canada and the United States. Unsolicited offering of audit services is forbidden in Australia and Canada. Both practices are forbidden in Japan.

[18] For instance, Jeter and Erickson (1995) have observed that defective audits are less frequent in those American states that allow unsolicited offering of services.

indirect inefficiencies by unleashing competition or "rent-seeking" processes when potential entrants compete to secure monopoly rents.

2.2 Low-cost safeguards

There are also low-cost strategies for generating performance incentives. They are based on prior performance of obligations, a cross-market reputation spread and the use of real assets with a value linked to a continued presence in an activity or market. These are all applicable to the auditing field and because of their low cost are preferable from the social point of view. Regulation would thus do well to facilitate them and enhance their effectiveness.

a) The most elementary strategy of this type is to build a *reputation* by providing higher than expected quality and refraining from opportunistic behavior.[19] This is of fundamental importance and forms the cornerstone of the system of safeguards. It operates slowly, however, and can also result in allocative inefficiencies when introductory pricing is used,[20] although these inefficiencies are probably of a secondary nature. Moreover, the value of a reputational guarantee is highly sensitive, this being precisely the result of its high degree of effectiveness. This sensitivity, however, becomes a disadvantage when subjected to opportunistic or arbitrary action. For this reason, regulation must ensure that reputational penalties are in line with the breach of professional duties. In particular, it must prevent those not in breach from being penalized. In this respect, the legal system must prevent undue loss of reputation from being caused by competitors and, in particular, by supposedly independent third parties.

b) The strategy based on *stretching* reputation or other safeguards used in one market to facilitate contracting in other markets is also low-cost.[21] Audit firms have used this strategy to sell non-audit services, which tend to be problematical to contract as a result of informational asymmetry in relation to their quality. For this reason, auditors are natural providers of such services since they can ensure their quality by means of the reputational assets they have built up in supplying reliable auditing services. The fact that such contractual resources can be used

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[19] The costs of developing a reputation to safeguard auditing quality are shown in several empirical studies, mainly Craswell, Francis and Taylor (1995).

[20] For an introduction on the multiple possibilities of signaling quality through pricing, see Carlton and Perloff (1994: 562, n. 4).

in a more intensive and efficient manner means that it is inadvisable to adopt rules making it more difficult to provide services. These contractual economies of scope flow both ways. Thus, not only do new non-audit services benefit from the reputation acquired in providing audit services, but the effect is mutual: reputation and other safeguards are utilized more intensively by broadening the set of activities carried out by the firm. As a consequence, the quality of audit services is also being ensured at a lower cost, or better quality is provided at the same level of safeguarding costs.

c) The third low-cost strategy is the *use of specific assets* with a value that would deteriorate when clients are lost or when the provider eventually has to abandon the activity completely.[22] In auditing, the main such asset is the information accumulated on clients, their activities and the markets in which they operate. These specific assets can act as safeguards or hamper quality. The role they play will depend on audit firm size,[23] and the degree of client diversification. In a firm with a single client the threat of losing such assets, which are to a large extent "client specific", may make the auditor more disposed to compromise his independence.[24] In a firm with a diverse client base, on the other hand, specific assets act as a safeguard. The reason is that, if its independence *vis-à-vis* one client is compromised, the auditor retains the assets specific to the particular client but endangers the assets specific to other clients. If a lack of independence is discovered, other clients would tend to change auditor or penalize him in some other way. This analysis of specific assets is of considerable

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[21] For a classical analysis on how these issues are seen by marketing experts, see Aaker (1991).

[22] See footnote 13 for a definition and references.

[23] As pointed out in the pioneering work of DeAngelo (1981b), the connection between the size of the audit firm and, consequently, the volume of its specific assets and audit quality is unquestionable in relation to technical competence. It must be qualified in relation to independence, however, since, as there is a positive correlation between the size of firms and the size of their clients, client diversification may determine independence more than the mere size of the firm.

[24] Many models of auditor behavior consider only one audit relationship. One such is that by Dye (1991), who analyzes the effect of auditor quasi-rents on the perception of auditor independence by external observers. As a consequence of considering only one client, observable auditor quasi-rents exert an unambiguously negative effect on the perception of independence. The effects that quasi-rent appropriation by the auditor exert on the value of the clientele of the firm as a whole are also important. These suggest that auditor quasi-rents might favor independence. Applying Dye's reasoning, discounting the price of the initial audit ("lowballing") could even serve just the opposite purpose: to raise real auditor independence to the level expected by outsiders.

importance to regulation since the latter can promote diversification or even make it mandatory, although the latter option is less advisable.[25]

d) *Self-regulation and organizational safeguards*. Independent auditing mainly serves to reduce any conflicts which may arise in contracting with those providing financial resources, whether shareholders or creditors. Clients are therefore interested in users of the audited accounting information perceiving the auditor as independent of the client. Such client concern leads to a concern amongst auditors themselves and it is understandable that they should implement policies of all types aimed at reinforcing their independence. For this purpose, codes of good practice have been adopted by professional self-regulatory bodies and firms themselves. Firstly, professional organizations must maintain a good reputation if they are to survive. Over the years, they have taken care to adopt various standards and organizational patterns with a view to reducing risks which could harm auditor independence and, in particular, the appearance of independence.[26] Secondly, many incentive and control devices of an individual, hierarchical and mutual nature ensure that both individual auditors working for audit firms as well as divisions within a firm and affiliated firms within a network have strong incentives to maintain the required attributes of service quality, including independence. The following are a few of these devices: partners' remuneration is not based primarily on revenue generation or short-term local profits, but on performance variables which encourage them to take a broad perspective, including the global results of the firm and measures of service quality; internal procedures to avoid individual biases and overconfidence are common, such as having audit engagement partners serve public companies for no longer than a certain number of years; finally, control is also exercised among offices and countries, by having personnel from one area inspect the work of another geographic area.

[25] This argument has been further developed in Arruñada (1999: 143-55; 1997: 63-87). An application was also adapted to analyze mandatory auditor rotation in Arruñada and Paz-Ares (1997: 48-56).

[26] The general guidelines of the Federation of European Accounting Experts (FEE) are representative of the spirit of these standards in that they state the following. "In considering whether to undertake other assignments for an entity of which he is auditor, the auditor's duty is to satisfy himself that the assignment will not affect his ability to act in an objective, independent and impartial capacity. He must especially make sure that he will not be in a position to take any decision on behalf of the audit client. He must evaluate the matters discussed in section 1 above and take any necessary steps to safeguard his objectivity and to satisfy those with a legitimate interest that he has done so" (FEE, 1995, Section 4.2.1).

3 Attainable objectives of audit regulation

The above analysis of the attributes of audit quality and of private quality safeguards will be used in this section for the discussion of the objectives of audit quality. Such analysis leads to the conclusion that the regulator has two functions, namely, as facilitator and as implementer of a safeguard strategy: On the one hand, the regulator needs to work indirectly, facilitating the sanctioning, and therefore motivating, activities of the market and judges (Section 3.1). On the other hand, the regulator must take account of the superiority in terms of quality of a guarantee that is based on developing safeguards, which enable advantage to be taken of economies of scope of a contractual nature, rather than on fragmentation, which suffers from diseconomies of both scale and scope (Section 3.2).

3.1 Regulation as a facilitator of judicial and market controls

Reflection on the role of regulation and the action of regulators in the auditing field must take into account two types of control that operate for the auditing profession: legal sanctions, via civil and criminal liability, and the market reaction, mainly via reputation. Regulators can opt either for an indirect intervention strategy by facilitating the work of these two controls and the complementary role of self-regulation, or for a strategy of direct intervention. The objective of this article is not to fully evaluate the relative merits of these two options, however, as this would require a more exhaustive analysis than can reasonably be provided here. With this caveat in mind, our analysis of the interactions between quality attributes and private safeguards suggests that the indirect strategy is more effective and flexible, and should play a preferential role.

The guiding principle of regulation should therefore be to allow audit firms, self-regulatory bodies and audit clients to discover through competitive market interaction both the efficient mix of services and the corresponding quality safeguards, adjusting for the costs and benefits of each possibility. The reason for entrusting this task to the market is based on comparative advantage: the incentives and the ability of market participants seem perfectly capable in this case of guiding such a discovery process. Regulators, on the other hand, frequently lack both the required knowledge and the right incentives to define the efficient framework. The lack of knowledge is inherent in their position as neither producers nor clients. The defective incentives are to be found in at least two potential biases. They may tend, firstly, to exaggerate

possible external effects and consequently require higher than optimum quality and quantity, as this additional quality involves no cost for them. Secondly, they are likely to be swayed by private interests alien to the audit market, as shown by the variety of prohibitive or restraining regulations.

Allowing the market to be the driving force behind trends in the audit sector does not mean that there is no role left for regulation. Rules are still needed to facilitate the smooth functioning and speedy adjustment of the market. Regulators should therefore concentrate on promoting and facilitating competition in order to enhance market incentives, by means of policies aimed at increasing informational transparency and facilitating the creation of private quality safeguards.

The functions of regulators of auditing (and, to some extent, those of self-regulatory bodies) may include the following stages or tasks:

a) *Protection of reputation*. The effectiveness of the reputational guarantee is derived from its high degree of sensitivity. This characteristic involves a danger when firms with reputation are the victims of opportunistic or arbitrary action. One essential role of regulation is, therefore, to maintain a proportion between the breach of professional duties and reputational sanctions. Above all, firms should be prevented from suffering sanctions of this type when they have not failed in their professional duties. Those elements of the institutional framework which occasionally allow both competitors and, in particular, supposedly independent third parties from causing unwarranted harm to reputation by means of frivolous actions or by taking precipitate precautionary measures should be reviewed. More generally, judges and regulators in this field should be very much aware that a good commercial reputation is surely the most valuable, and of course the most sensitive, asset of firms of the highest quality.

b) *Cautious definition of quality standards*. In the case of auditing, the existence of minimum quality standards seems essential for the explicit safeguard mechanisms to function effectively, principally that providing for professional liability. A standard is in fact needed to establish which particular conduct constitutes diligent action and which constitutes professional malpractice.[27] Standards are also necessary in order for professionals to know what constitutes an adequate level of quality although, in this respect, the fundamental caution

[27] The results of the empirical study by Carcello and Palmrose (1994) suggest, for example, that the supervisory activity of the SEC facilitates litigation against auditors.

arising out of the analysis developed in Section 1.2.2 should be borne in mind: the legislative framework must avoid the temptation of defining overly-stringent standards which would lead to defensive audits of little informational value. Moreover, the greater the relative importance assigned to implicit safeguards, the less important the role of legislative standards and the greater that of firms' internal ones. Furthermore, the function of the latter is different, insofar as the market's judgement of professional conduct is not based on compliance with standards but on results.

c) *Production of information relevant to market functioning*. Regulation can considerably facilitate the stream of information that is useful for the functioning of the control and sanction mechanisms operating in the open market. One possibility is to make it obligatory to disclose information which private parties might often be reluctant to provide because of collective action problems or third-party effects. These might prevent individual voluntary disclosure from reaching optimal levels with regard to both the amount and content of the disclosed information,[28] departing from the situations in which firms disclose on their own initiative, to avoid being classified as bad quality providers.[29] For instance, disclosure could damage the confidentiality of the relationship with clients, possibly revealing information of strategic value for competitors. Even if private cost is smaller than private benefit, it may be the case that the net surplus is positive only when all firms disclose. However, individual firms may be better off not disclosing if some other firms do disclose, with the final outcome that no firm discloses.[30] Likewise, disclosed information might be more valuable when it is used to obtain knowledge about the industry or it serves to make comparisons amongst firms in the industry. In both cases, the value of the information disclosed by any one firm is not fully appropriated by it, generating positive externalities. Furthermore, regulation may enjoy some advantages over the market in standardizing the contents and the language of disclosure.[31]

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[28] For an account of the main issues involved in corporate disclosure along similar lines to the one argued here, see Easterbrook and Fischel (1991, pp. 276-314).

[29] See Grossman and Hart (1980), Grossman (1981) and Milgrom (1981).

[30] Jovanovic (1982), Verrecchia (1983) and Dye (1986) model situations in which uninformed parties do not always infer bad quality from non-disclosure, due to the presence of disclosure costs. As a consequence, voluntary disclosure is less than optimal. In particular, disclosure is not profitable for those providers of bad but not the worst quality at some point in the quality scale.

[31] This can be particularly important when limiting discretion controls the informational content of the disclosure because discretion affects how the disclosed information is seen by recipients, as modeled in Fishman and Hagerty (1990).

Consequently, regulators should focus on eliminating any barriers that might be hindering disclosure on a voluntary basis. Candidates for this can be derived directly from the previous discussion. In particular, mandatory disclosure should be seen and structured as a solution to free-riding problems among potential disclosers. Moreover, the regulator can act as ex post verifying agent. By providing more information to the market, the latter thereby becomes more transparent, and any adjustments or sanctions which the market itself imposes on operators who reduce quality are faster. Also, the regulatory body is in a good position to act as a central recipient of information regarding the sector, both of a statistical and monitoring nature. In particular, it has the advantage of acting as a depository of information relating to compliance with legislation, the disclosure of which to the market could compromise competition between firms. This is easily controllable both directly by the regulatory authority and indirectly (in which case, the reliability of the information is only verified in the case of inspection or litigation).

d) *Monitoring of compliance with quality standards* by the regulator or self-regulatory bodies has a major advantage—understanding of a discipline of a professional and specialized nature, which favors control being carried out by the experts themselves. Nevertheless, the risks are also considerable. Control by a public regulator is capable of being ineffective and very costly, as experience has shown in other sectors in many countries. On the other hand, both procedures, particularly self-regulation, can easily succumb to the temptation of encouraging anti-competitive practices. For these reasons, priority should be given to facilitating the functioning of the other control mechanisms of both a legal and market nature.

3.2 Fragmentation versus safeguard regulatory strategies

There are considerable problems in contracting professional services as a result of the substantial informational asymmetries between supplier and client, as explained in Section 1. This informational inequality usually generates conflicts of interest of all types. To overcome these problems, two possibilities can be put forward at a theoretical and general level. These will be referred to as fragmentation and safeguard strategies:

a) The *fragmentation strategy* functions by assigning the different stages or components of contractual processes to different professionals, trusting that by acting in opposition, conflicts of interest will be reduced. It thus seeks to contain the conflict of interest which gives rise to the problem, and can therefore be expected ideally to lead to lower safeguard costs. On the

other hand, the economies of scale and, in particular, economies of joint production (or "scope") which are usually generated when the same professional is involved in several stages, or plays several roles in the same contractual process, must be sacrificed. Joint audits, which are compulsory in various European countries,[32] are an extreme example of fragmentation strategy. They aim at improving independence by superimposing two parallel checks. Mandatory rotation also involves something of this strategy, although the aim is sequential rather than parallel verification. An important problem of both types of regulation is obviously cost: rotation duplicates the start-up costs for each rotation and pure joint auditing duplicates virtually all costs.

b) The alternative *safeguard strategy* seeks to eliminate the consequences or manifestations of conflicts of interest rather than their origin, to which end the incentives of professionals need to be reinforced in order that they respond correctly to all eventualities. This therefore involves greater safeguard costs but brings with it the benefit of economies of scale and, particularly, economies of scope. In this area, for example, very different solutions are adopted in different countries in real-estate transactions. The fragmentation strategy dominates in the Anglo-Saxon world, in which each party is represented by his own lawyer. In European legal systems, on the other hand, the figure of the Latin or Roman-Germanic notary to a large extent plays the role of lawyer simultaneously and independently for the two or three parties usually involved in transactions.[33] Even more clearly, the Spanish registration system embodies certification functions in the Registrar which in other neighboring systems are carried out through a costly process of notification and defense by the parties affected (Germany). Also, in those countries which, like the United States, maintain the old "recording" system of simple deposit of documents to give effect to transactions, even longer and more costly sequences of intermediaries and title insurance need to be employed.[34]

In summary, a guarantee of quality in transactional services can be sought in fragmentation and confrontation or in the safeguard of integrated action. The latter is not only generally more economical but it can also provide higher quality, for two reasons. Firstly, it enjoys economies

[32] Specifically, different variations of joint auditing are required in Denmark, Finland, France, Italy (distributing part of the work) and Sweden, according to Buijink *et al.* (1996, pp. 41-2). Joint audits are also required for specific firms in some other countries (e.g. for banks in Canada).

[33] See Arruñada (1995 and 1996).

[34] See Arruñada (1998).

of joint production, of both a technological and contractual nature.[35] Secondly, the reduction in conflicts of interest which fragmentation aims to achieve is not always achieved. Application of these ideas in the auditing field is closely connected with the provision of non-audit services. A prohibitive rule would place us in the costly area of fragmentation. On the other hand, simultaneous provision of auditing and non-audit services may enable higher quality to be provided at a lower cost.[36]

4 Conclusions

Three elements are crucial in developing an efficient regulation of auditing: "professional judgement", the tricky nature of audit quality and the existence of alternative quality assurance techniques.

First, professional judgement means that auditors use information that is unverifiable or costly to verify when deciding on an audit report. As a consequence, verification capabilities determine which approach regulators should follow. If they think that the market is able to verify and sanction a broader set of performance variables than the regulators or the judiciary can, then regulation should be market-friendly in the sense of facilitating market sanctions instead of substituting them. Otherwise regulation risks inducing "defensive auditing" with auditors using only *hard* evidence to support their opinions, and audits becoming trivial.

The second important element for regulating audit quality is that clients are mainly harmed not when their audit has low quality but when some other client of the same auditing firm unexpectedly fails, without any warning from the auditor. Therefore, clients have very strong incentives to monitor, evaluate and compensate audit firms' quality. Meaningful regulation would focus on helping this monitoring process by providing useful information. This could

[35] Taking advantage of economies of scope is the basis of the so-called *gatekeepers*, taken as guardians of the law, developed by Kraakman (1986), who defines them as private agents "who are able to disrupt misconduct by withholding their cooperation from wrongdoers. [.... This cooperation or] support—usually a specialized good, service, or form of certification that is essential for the wrongdoing to succeed—is the 'gate' that the gatekeeper keeps" (pp. 53-4). For the auditor's work to correspond faithfully to this figure, essentially this depends on the importance given to his role as producer of "externalities", that is, the economic effects which are external to the parties involved in the transaction.

[36] This argument has been developed in Arruñada (1999: 69-108).

make it advisable to adopt mandatory disclosure rules if private incentives in this regard are considered insufficient because of problems of collective action among and within audit firms.

The third element to consider is that audit firms use diverse mechanisms to safeguard quality such as reputation and specific assets. These differ in the costs of putting them in place and their suitability to different situations and clients. Regulation should take into account how these mechanisms work in order, first, not to hinder the use of low-cost safeguards such as client quasi-rents or "brand-stretching". Second, regulation should allow some discretion in order for firms and clients to choose an efficient mix of safeguards.

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